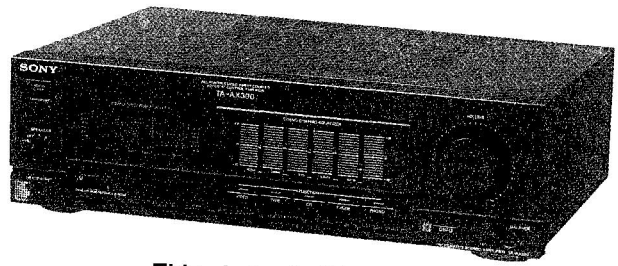
TA-AX390/AX391

SERVICE MANUAL

US Model



This photo is TA-AX390.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads both channels driven, from 20 – 20,000 Hz; rated 135 watts per channel minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Power bandwidth (IHF)	30 Hz – 30 kHz (8 ohms, 65 watts)
Dynamic headroom	1.7 dB ('78 IHF)
Harmonic distortion	Less than 0.9% at rated output
Frequency response	PHONO: RIAA equalization curve TUNER, CD, VIDEO, TAPE: 30 Hz – 30 kHz ±3 dB
Damping factor	27 (8 ohms, 1 kHz)

Input

Input jack	Jack type	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO MM	Phono	3.0 mV	50 kilohms	71 dB 75 dB * (A, 3.0 mV)
TUNER CD VIDEO TAPE	Phono	250 mV	50 kilohms	92 dB 83 dB * (A, 250 mV)

* '78 IHF

Output

REC OUT	Phono jacks	Voltage 150 mV Impedance 1 kilohm
SPEAKERS	—	Accepts speakers of 8 – 16 ohms.
HEADPHONES	Stereo phone jack	Accepts low and high impedance headphones.

GRAPHIC EQUALIZER controls

Boost/cut range: ±8 dB (100 Hz, 330 Hz, 1 kHz, 3.3 kHz)
: ±6 dB (10 kHz)

General

System	Preamplifier: Low-noise, high-gain equalizer amplifier Power amplifier: Pure-complementary SEPP OCL power amplifier with all stages directly coupled
Power requirements	120 V AC, 60 Hz
Power consumption	235 W
AC outlets	3 switched, total 100 watts max.
Dimensions	Approx. 430 × 130 × 355 mm (w/h/d) (17 × 5 1/8 × 14 inches)
Weight	Approx. 8.5 kg (18 lb 12 oz)
Supplied accessory	Remote commander (1) (TA-AX390: RM-S390, TA-AX391: RM-P202)

Design and specifications subject to change without notice.

MICROFILM

INTEGRATED STEREO AMPLIFIER

SONY®

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

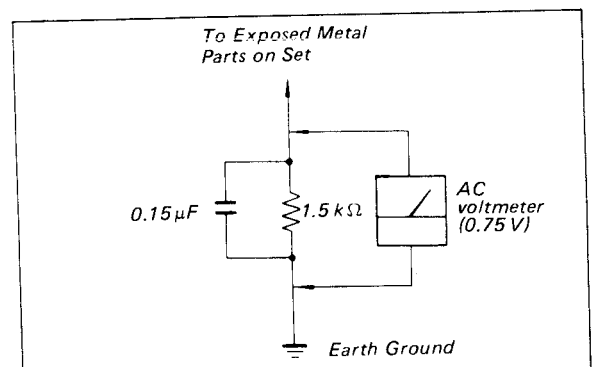
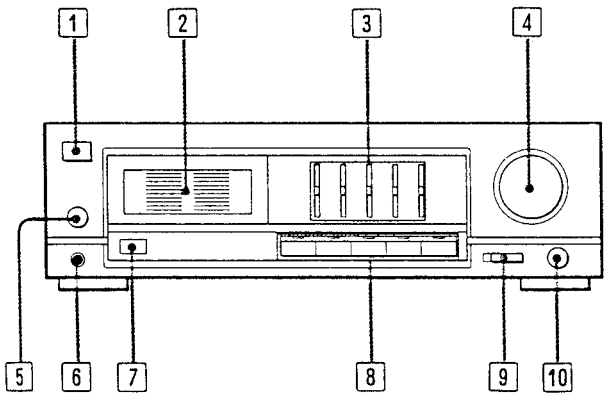


Fig. A. Using an AC voltmeter to check AC leakage.

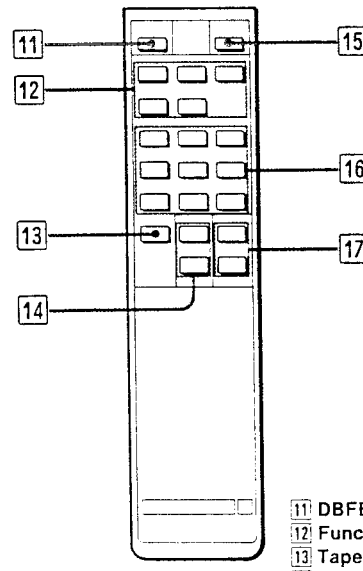
SECTION 1
GENERAL

1-1. LOCATION OF CONTROLS



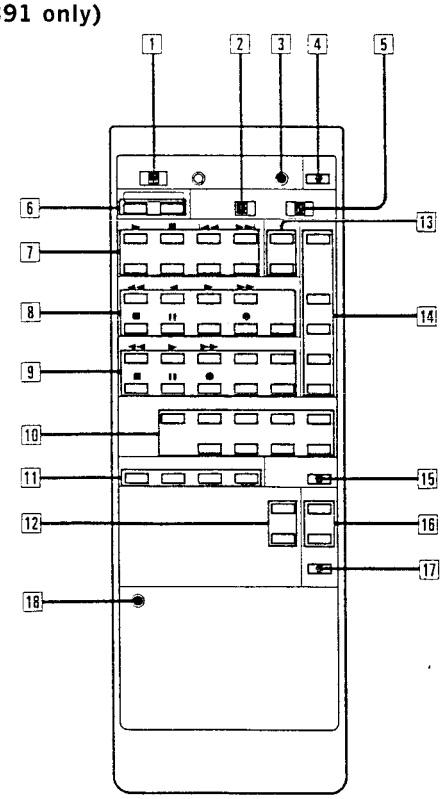
1 SYSTEM POWER switch
2 5 BAND Spectrum analyzer display
3 5 BAND GRAPHIC EQUALIZER controls
4 VOLUME control
5 SPEAKERS selector
6 HEADPHONES jack (stereo phone jack)
7 Remote control sensor
8 Function selectors
9 DBFB (Dynamic Bass Feedback) switch and indicator
10 BALANCE control

Remote commander (RM-S390) (TA-AX390 only)



11 DBFB button
12 Function selectors
13 Tape deck (B) pause button
14 TUNER PRESET buttons
15 POWER switch
16 CD player operation buttons
17 VOL (volume) control buttons

Programmable remote commander (RM-P202) (TA-AX391 only)



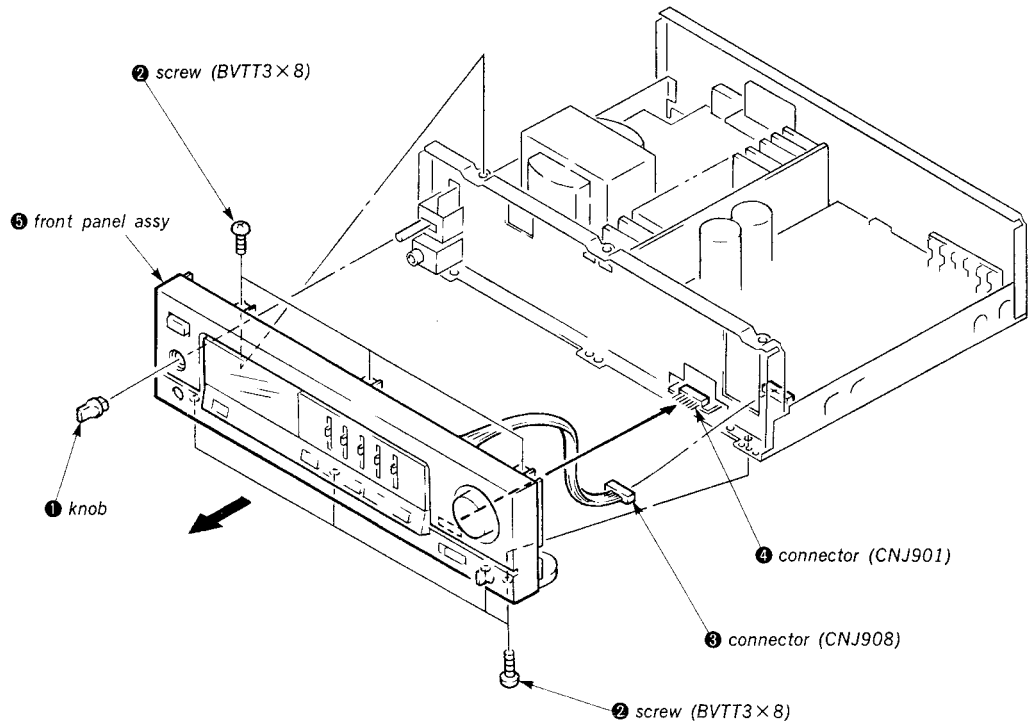
1 Mode selector
SONY STD: To control equipment manufactured by Sony.
USER STD: To control equipment whose signals you have programmed.
LEARN: To program the signals of other infrared remote commanders in the programmable area.
2 DECK (cassette deck) selector
Set to control Deck A or B of the optional cassette deck TC-WR700.
3 PROGRAM CLEAR button
4 POWER switch
5 VTR selector
Set to the same position as on a Sony VCR.
1: Beta format
2: 8 mm format
3: VHS format
The mode selector should be set to SONY STD.
6 POWER switches for TV and VCR
7 CD player control buttons
8 TAPE (cassette deck) control buttons
9 VCR control buttons
10 FUNCTION selectors
11 SURROUND sound selectors
12 TUNER PRESET buttons
13 PHONO START/STOP buttons
14 TV control buttons
15 DBFB (Dynamic Bass FeedBack) button
16 VOL (volume) control buttons
17 MUTING button
18 RESET button

Note
Avoid subjecting the remote sensor to direct sunlight or strong illumination. Otherwise, the remote-control operation could be impossible.

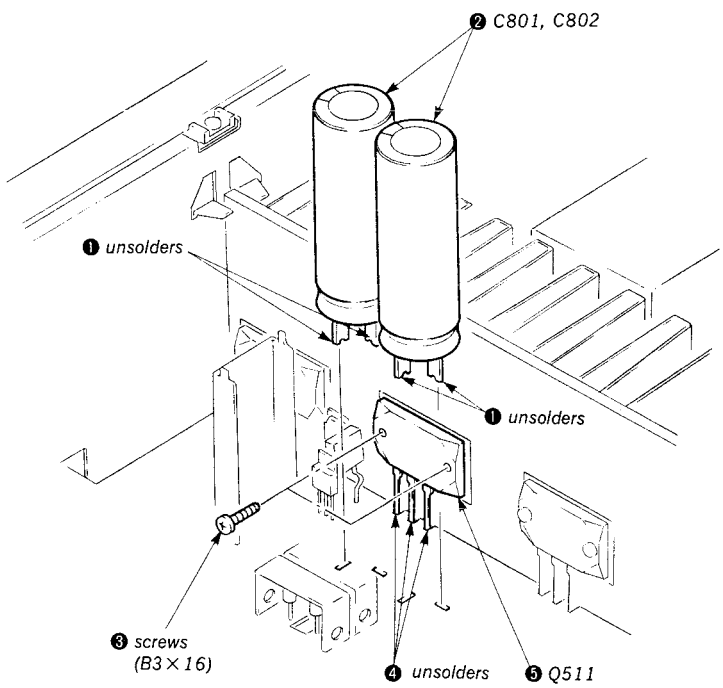
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

2-1. PANEL ASSY, FRONT



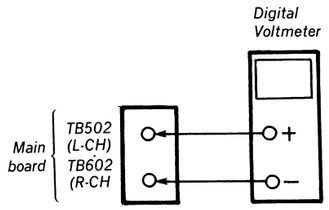
2-2. REMOVAL OF THE Q511



SECTION 3
ELECTRICAL ADJUSTMENT

Bias Adjustment

Procedure :

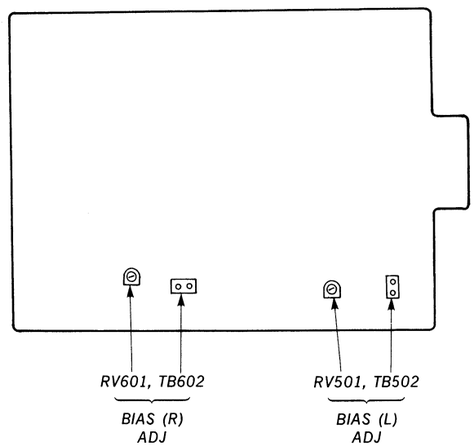


1. Turn ON the power by connecting a digital voltmeter with test pins TB502 (L-CH) and TB602 (R-CH).
2. Adjust RV501 (L-CH) and RV601 (R-CH) so that the indicator of digital voltmeter approaches 3mV as much as possible between 0.5 to 3mV when the power is turned ON.

Note : After the adjustment, when the voltage increases up to the stable state in course of time, confirm that the indicator of digial voltmeter indicates less than 6mV.

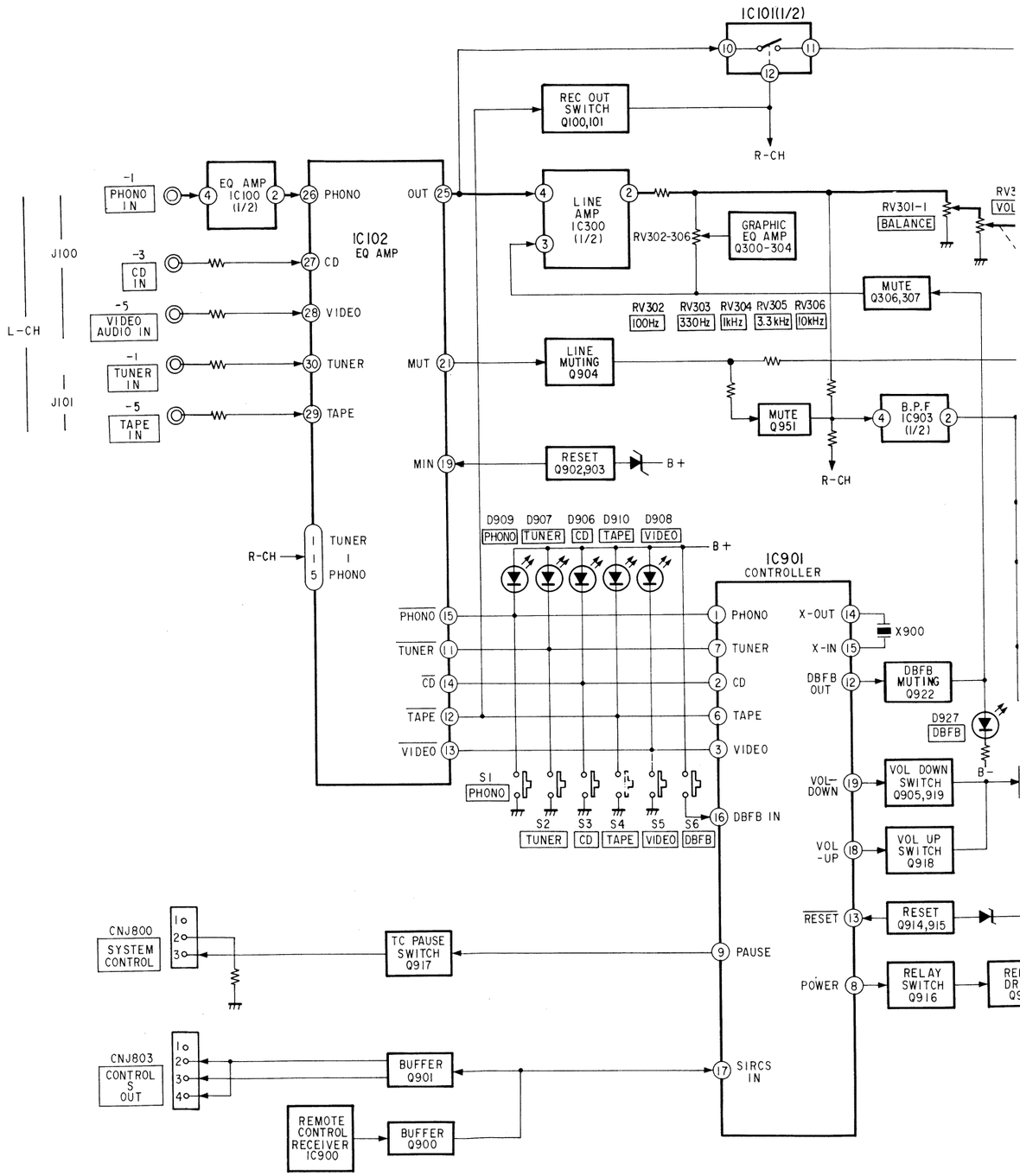
Adjusted value : $3 \pm^{0}_{2.5}$ mV

Adjustment Location : main board

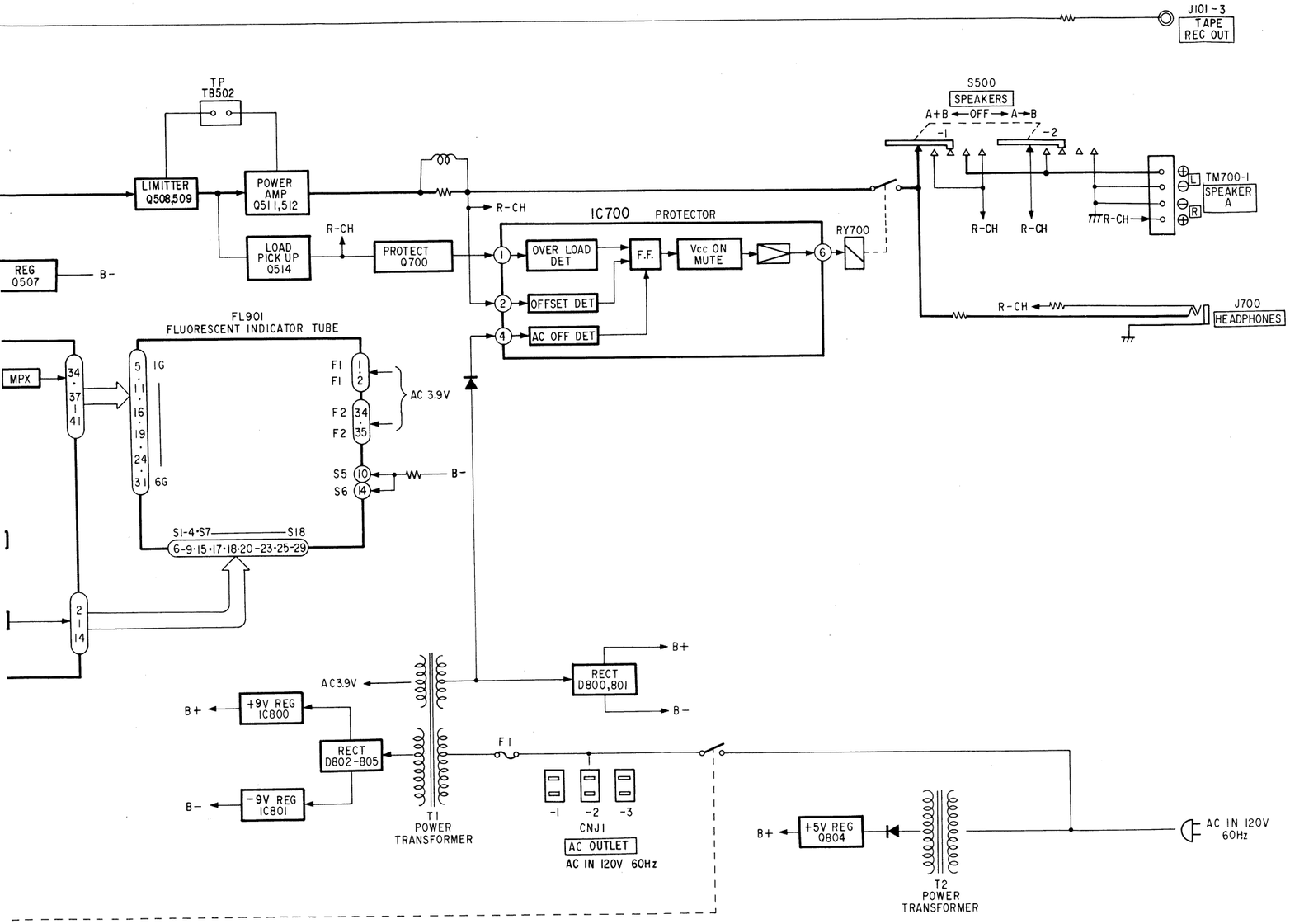


SECTION 4
DIAGRAMS

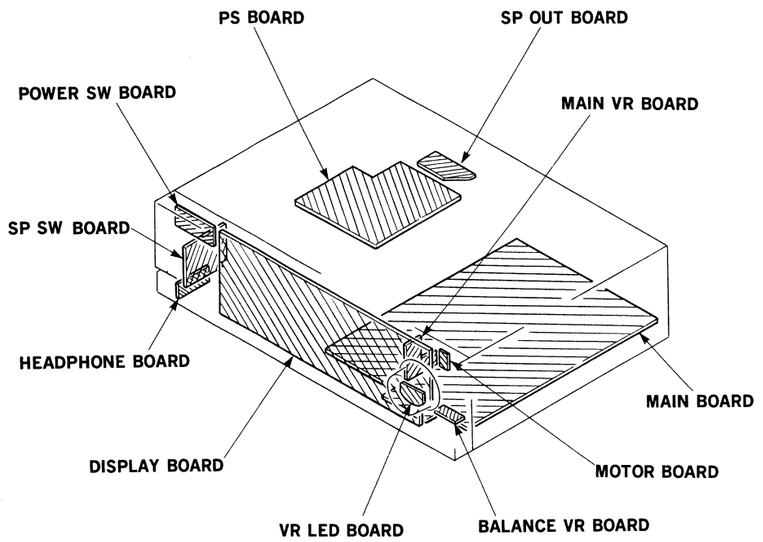
4-1. BLOCK DIAGRAM



—R—CH IS OMISSION—



4-2. CIRCUIT BOARDS LOCATION



• Semiconductor Location

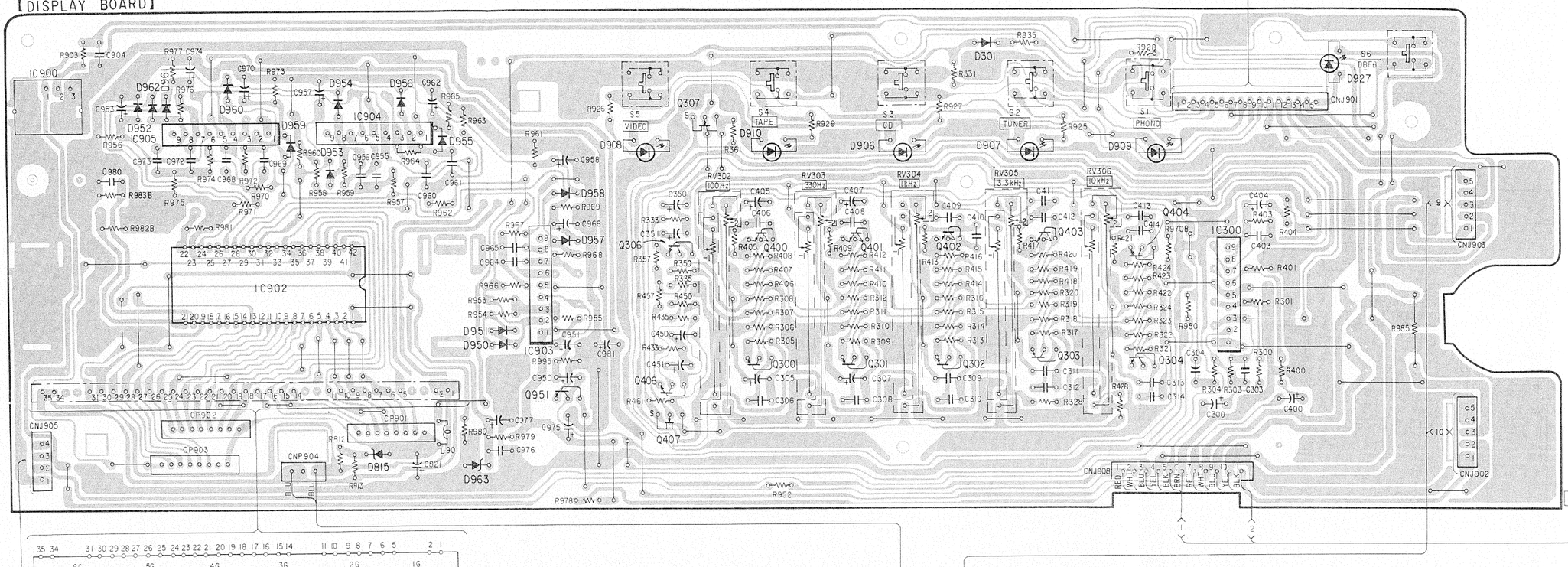
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D301	A-9	D909	B-10	IC801	G-25	Q512	I-17
D503	H-16	D910	B-7	IC900	B-1	Q514	H-16
D504	H-16	D911	B-19	IC901	B-20	Q605	I-23
D505	H-23	D913	H-30	IC902	C-3	Q607	H-19
D506	G-23	D918	H-11	IC903	C-5	Q608	I-24
D603	G-22	D926	E-19	IC904	B-4	Q609	I-22
D604	F-22	D927	A-12	IC905	B-3	Q611	I-25
D605	H-18	D950	D-5			Q612	I-22
D606	H-19	D951	D-5	Q100	D-24	Q614	H-22
D700	G-19	D952	B-2	Q101	D-24	Q700	F-17
D701	E-20	D953	B-4	Q300	D-7	Q804	B-22
D800	G-20	D954	B-4	Q301	D-8	Q872	G-16
D801	F-20	D955	B-4	Q302	D-9	Q900	A-21
D802	I-26	D956	B-4	Q303	D-10	Q901	B-22
D803	I-26	D957	C-6	Q304	D-10	Q902	B-23
D804	I-26	D958	B-6	Q305	D-19	Q903	B-22
D805	I-26	D959	B-3	Q306	C-6	Q904	C-23
D806	G-25	D960	B-3	Q307	B-7	Q905	C-18
D807	H-31	D961	B-2	Q400	C-7	Q908	C-17
D808	B-22	D962	B-2	Q401	C-8	Q909	C-18
D809	F-24	D963	E-5	Q402	C-9	Q913	B-21
D814	G-16			Q403	C-10	Q914	B-19
D815	E-4	IC100	B-25	Q404	C-10	Q915	A-20
D901	B-22	IC101	E-24	Q405	D-19	Q916	B-21
D902	B-23	IC102	C-24	Q406	D-6	Q917	B-22
D903	B-23	IC300	C-11	Q407	D-6	Q918	B-19
D904	B-24	IC301	E-18	Q505	I-18	Q919	C-18
D905	B-22	IC501	H-18	Q507	H-23	Q922	B-17
D906	B-8	IC601	G-23	Q508	I-19	Q951	D-5
D907	B-9	IC700	G-18	Q509	H-16		
D908	B-6	IC800	F-24	Q511	I-19		

TA-AX390/AX391 TA-AX390/AX391

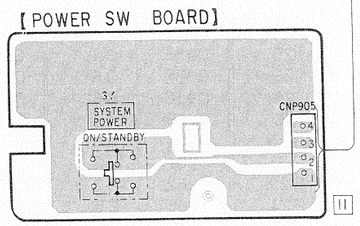
• Refer to page 9 for Semiconductor Location.
• Refer to page 22 for Semiconductor Lead Layouts.

4-3. PRINTED WIRING BOARDS

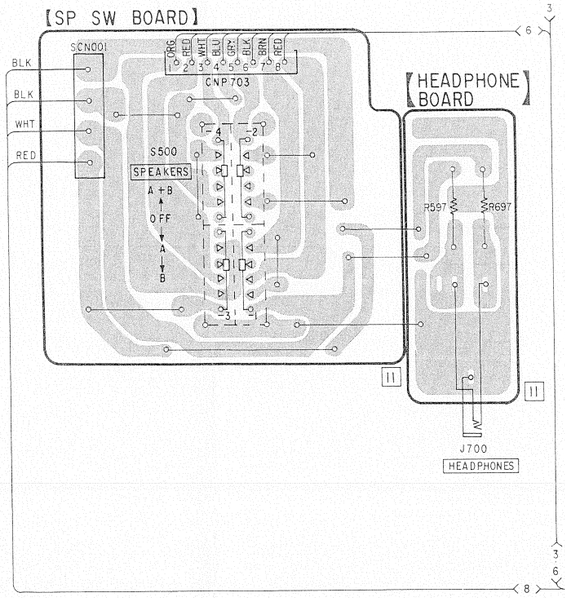
【DISPLAY BOARD】



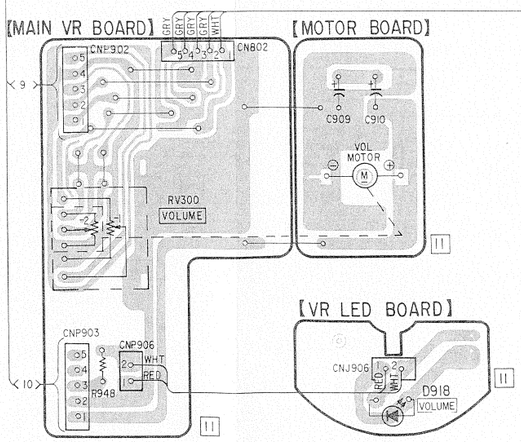
【POWER SW BOARD】



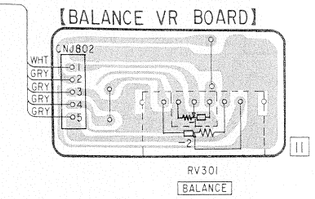
【SP SW BOARD】



【MAIN VR BOARD】



【BALANCE VR BOARD】

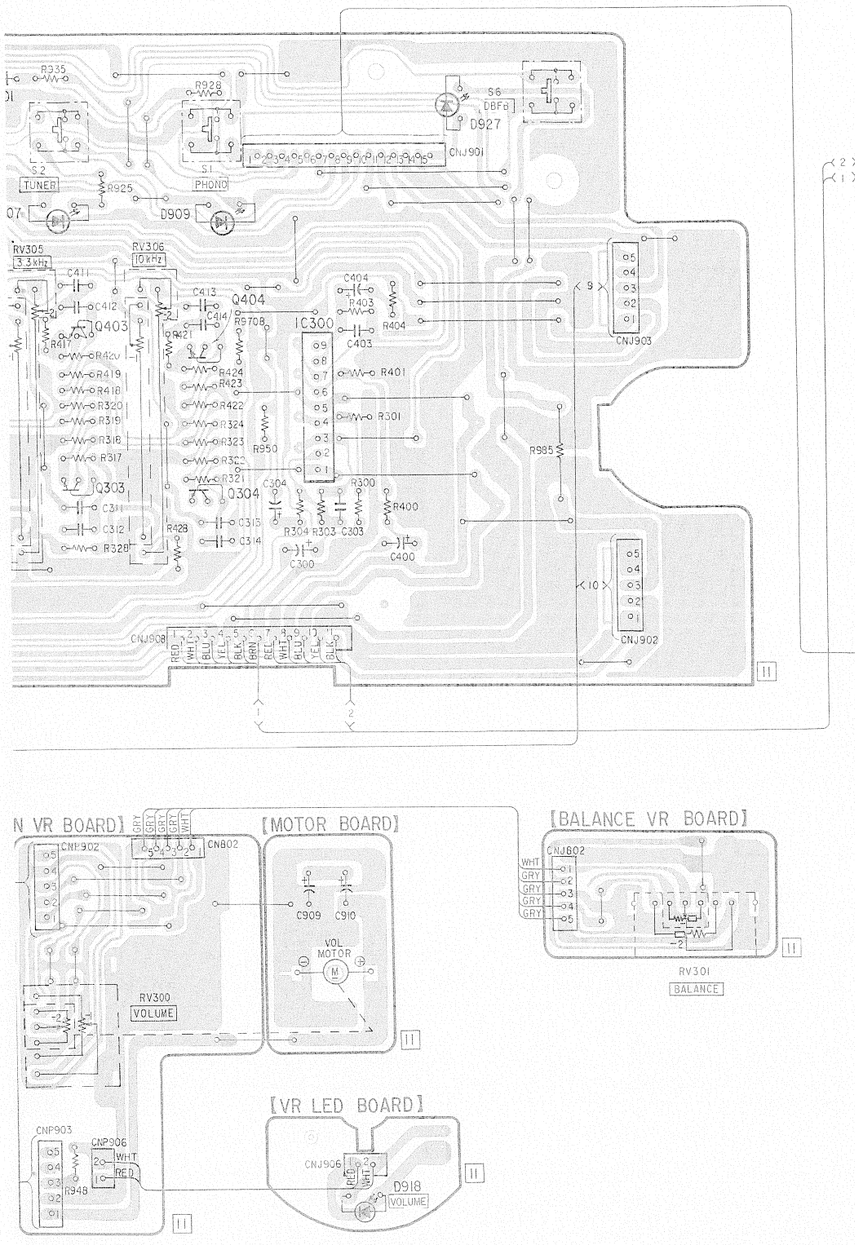


Note:

• ○—— : parts extracted from the component side.

TA-AX390/AX391

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

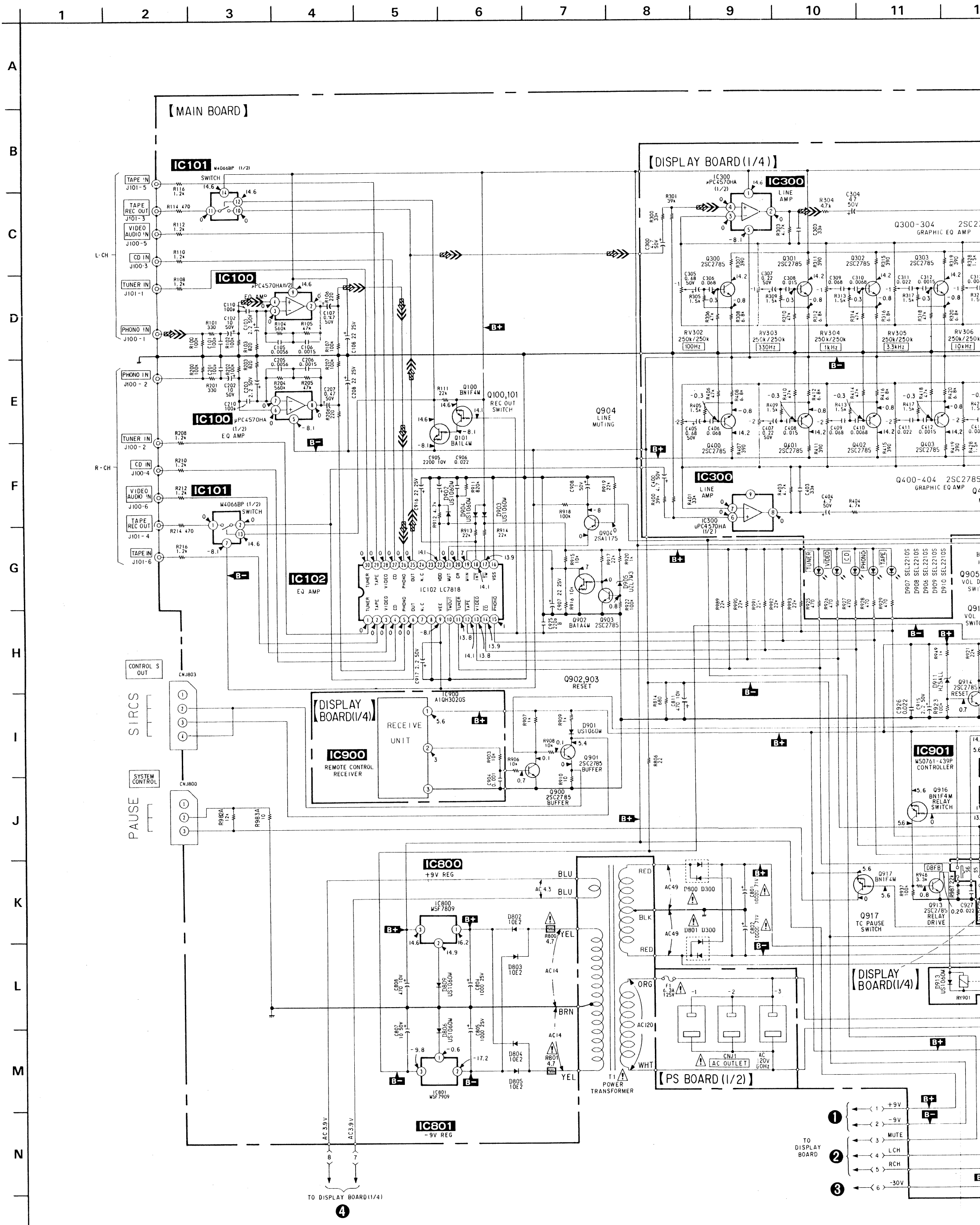


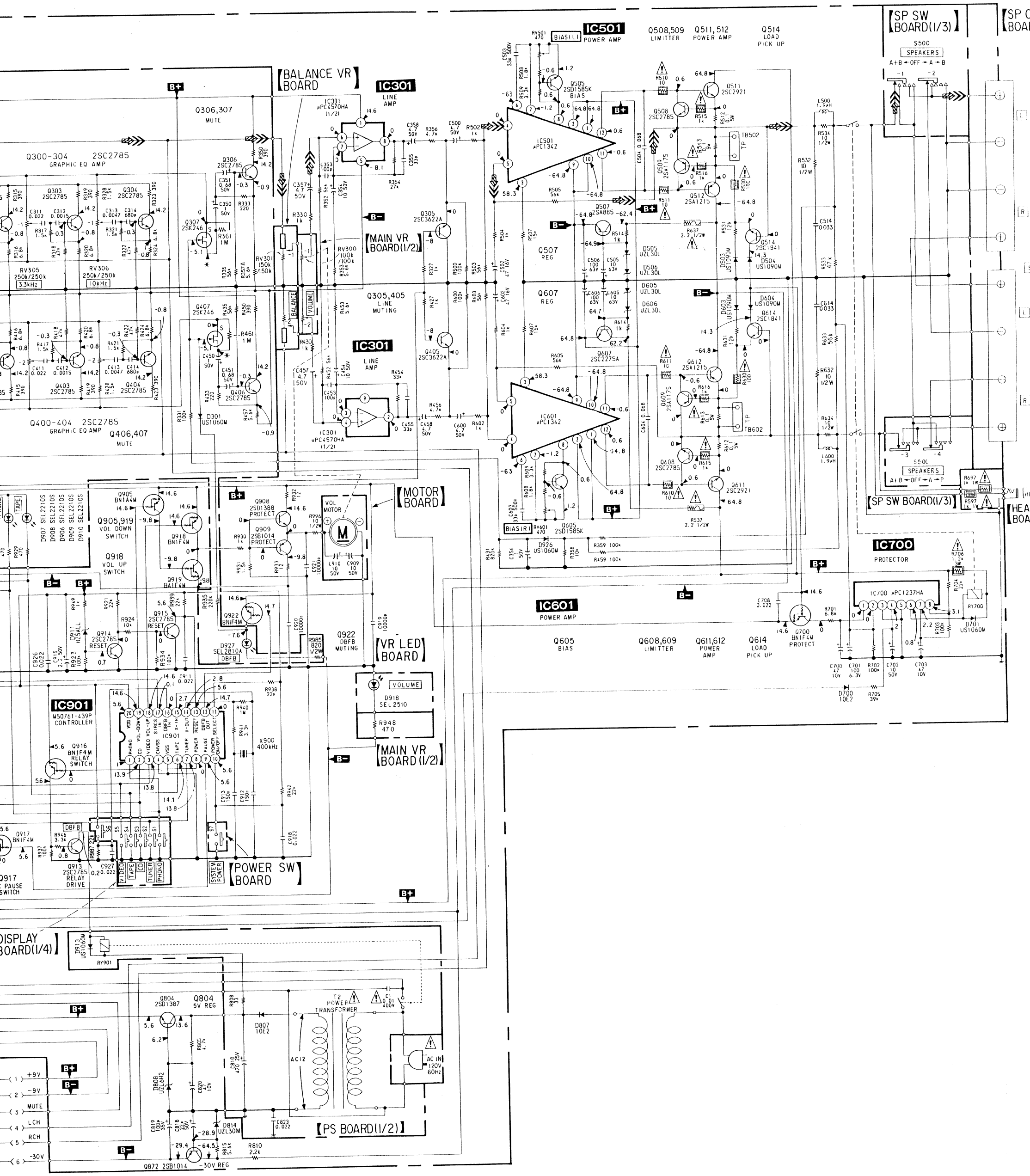
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

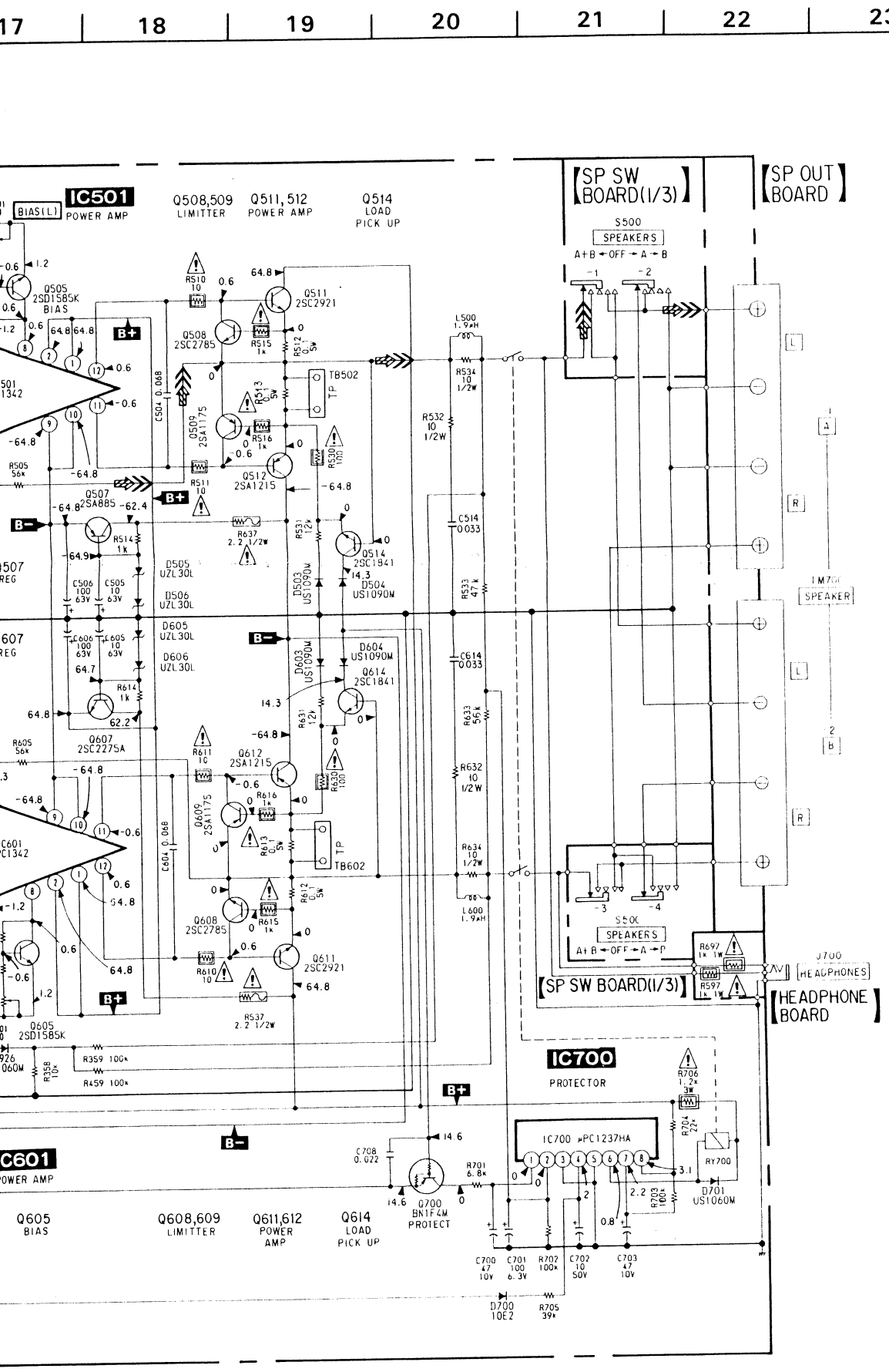
PHONO IN
CD IN
VIDEO AUDIO IN
TUNER IN
REC OUT
TAPE
IN
J100
J101
CNJ703
【SP OUT BOARD】
TM700
SPEAKER
T1 POWER TRANSFORMER
【PS BOARD】
CNJ 1
AC OUTLET
SWITCHED 100W MAX
AC 120V 60Hz
AC IN 120V 60Hz
TB 805
TB 803
T2 POWER TRANSFORMER
CNJ803
CONTROL S OUT
CNJ800
SYSTEM CONTROL
(CHASSIS)

4-4. SCHEMATIC DIAGRAM —MAIN SECTION—

- Refer to page 18 for Note.
- Refer to page 22 for IC Block Diagrams.




【BALANCE VR】
BOARD
IC301
LINE AMP
IC301 μPC4570HA (1/2)
Q306,307
MUTE
Q300-304 2SC2785
GRAPHIC EQ AMP
Q303 2SC2785
Q304 2SC2785
Q307 2SK246
Q305 2SC3622A
【MAIN VR】
【BOARD(1/2)】
RV305 250k/250k 3.3kHz
RV306 250k/250k 10kHz
RV301 150k/150k
RV300 100k/100k
BALANCE
VOLUME
Q305,405
LINE MUTING
Q407 2SK246
Q406 2SC2785
Q403 2SC2785
Q404 2SC2785
Q400-404 2SC2785
GRAPHIC EQ AMP
Q406,407
MUTE
D301 US1060M
IC301 μPC4570HA (1/2)
IC501
POWER AMP
IC501 μPC1342
Q505 2SD1585K BIAS
Q508,509
LIMITTER
Q511,512
POWER AMP
Q514
LOAD PICK UP
Q511 2SC2921
Q508 2SC2785
Q512 2SA1215
Q509 2SA1175
TB502
TP
Q507 2SA885
Q507 REG
Q607 REG
D505 UZL30L
D506 UZL30L
D605 UZL30L
D606 UZL30L
Q607 2SC2275A
Q612 2SA1215
Q609 2SA1175
TB602
Q608 2SC2785
Q611 2SC2921
D503 US1090M
D504 US1090M
D603 US1090M
D604 US1090M
Q514 2SC1841
Q614 2SC1841
BIAS(L)
BIAS(R)
D926 US1060M
Q605 2SD1585K
L500 1.9μH
L600 1.9μH
S500
SPEAKERS
A+B→OFF→A→B
【SP SW BOARD(1/3)】
【SP C BOAR
【HEA BOA
【MOTOR】
【BOARD】
Q905 BN1A4M
Q905,919
VOL DOWN SWITCH
Q918 BN1F4M
Q918
VOL UP SWITCH
Q919 BA1F4M
Q908 2SD1388 PROTECT
Q909 2SB1014 PROTECT
VOL MOTOR
D907 SEL2210S
D908 SEL2210S
D906 SEL2210S
D909 SEL2210S
D910 SEL2210S
Q922 BN1F4M
Q915 2SC2785 RESET
Q914 2SC2785 RESET
D911 HZ5ALL
Q922 DBFB MUTING
D927 SEL2810A DBFB
【VR LED】
【BOARD】
VOLUME
D918 SEL2510
【MAIN VR】
【BOARD (1/2)】
IC601
POWER AMP
Q605
BIAS
Q608,609
LIMITTER
Q611,612
POWER AMP
Q614
LOAD PICK UP
IC700
PROTECTOR
IC700 μPC1237HA
Q700 BN1F4M PROTECT
RY700
D701 US1060M
D700 10E2
IC901
MS0761-439P
CONTROLLER
IC901
X900 400kHz
Q916 BN1F4M RELAY SWITCH
Q917 PAUSE SWITCH
Q913 2SC2785 RELAY DRIVE
DBFB
VIDEO
TAPE
CD
TUNER
PHONO
SYSTEM POWER
【POWER SW】
【BOARD】
【DISPLAY】
【BOARD(1/4)】
D913 US1060W
RY901
Q804 2SD1387
Q804 5V REG
D807 10E2
T2 POWER TRANSFORMER
AC IN 120V 60Hz
D808 UZ2.6H2
D814 UZL30M
Q872 2SB1014
-30V REG
【PS BOARD(1/2)】
+9V
-9V
MUTE
LCH
RCH
-30V
B+
B-

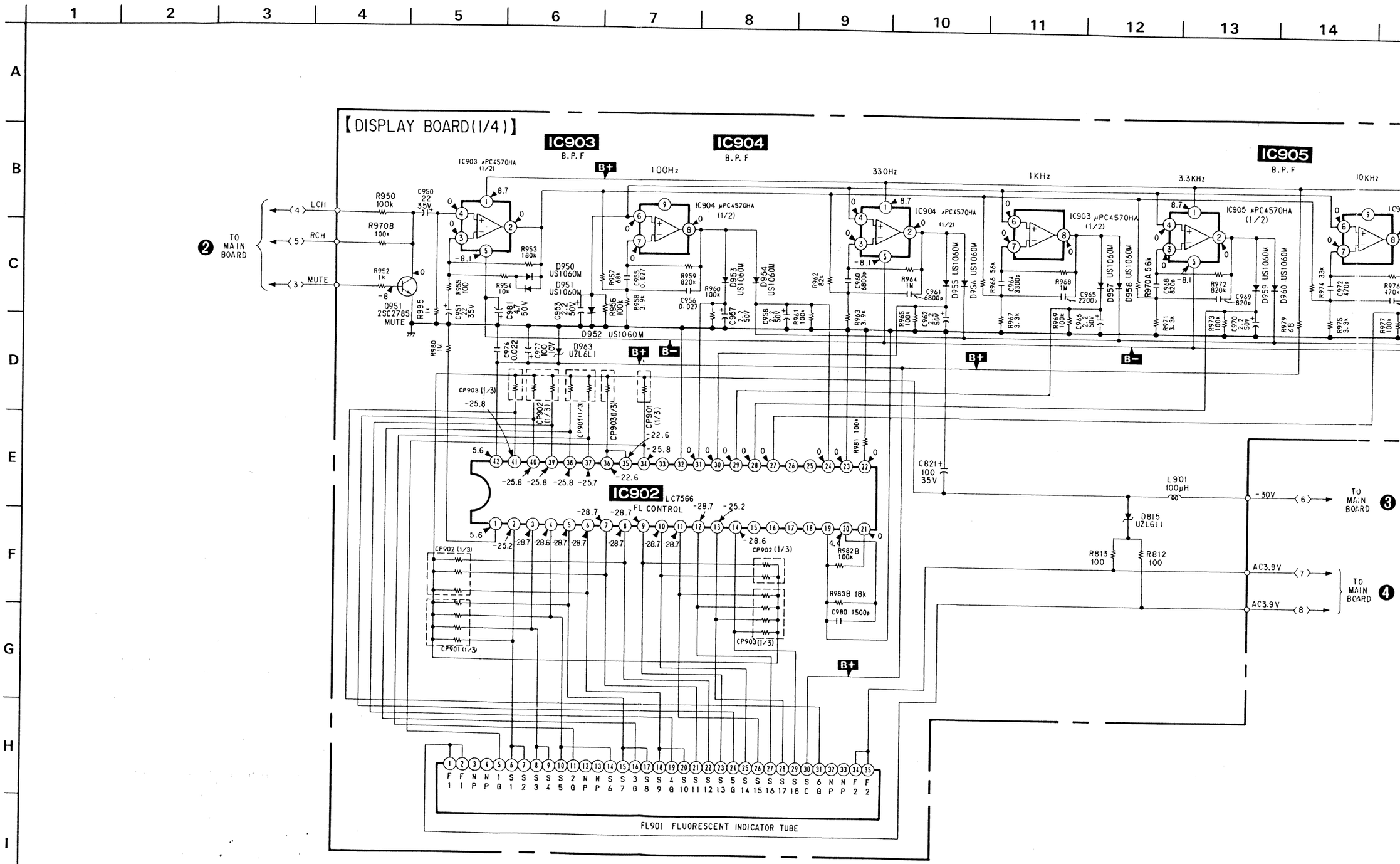


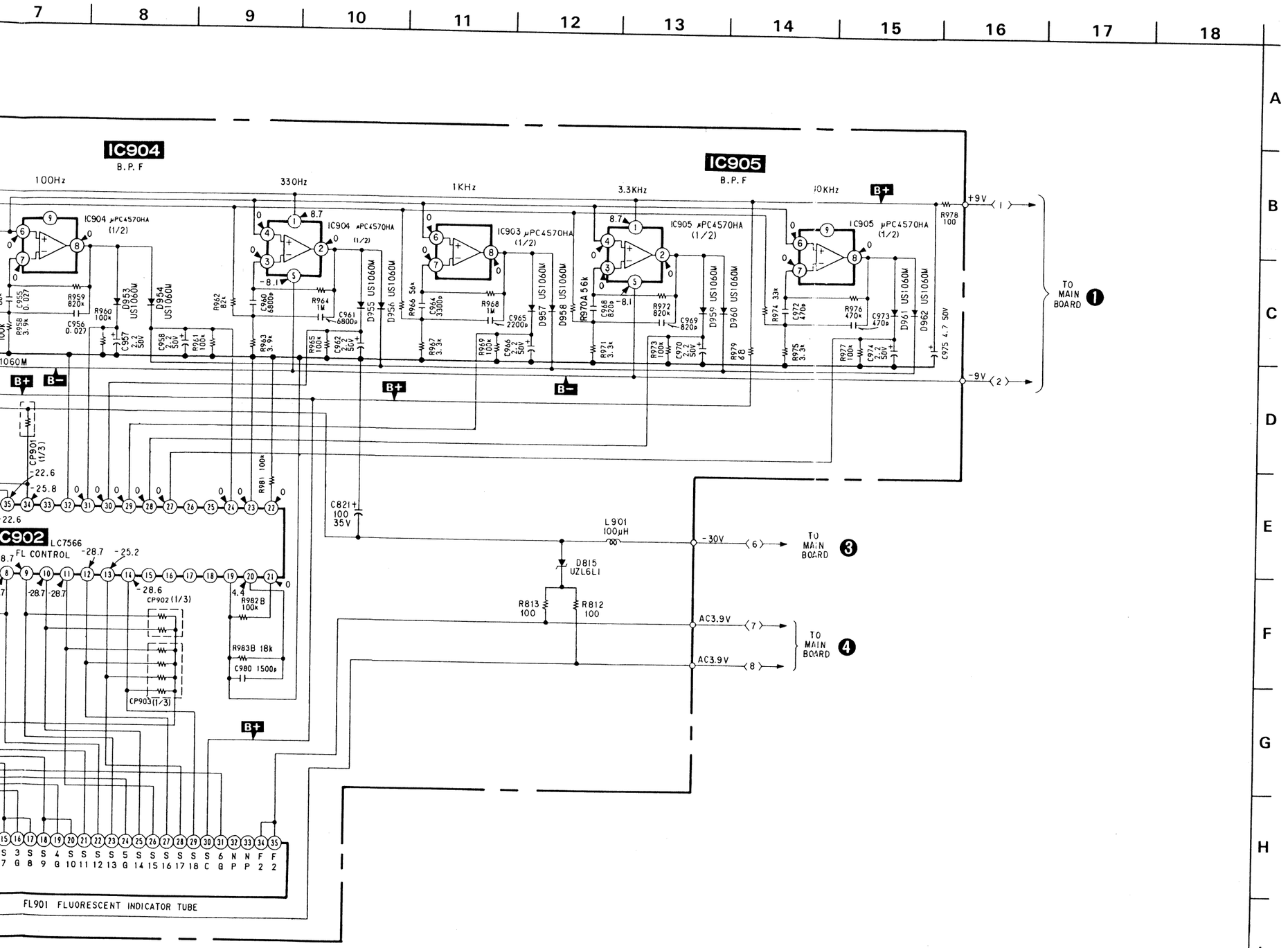
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

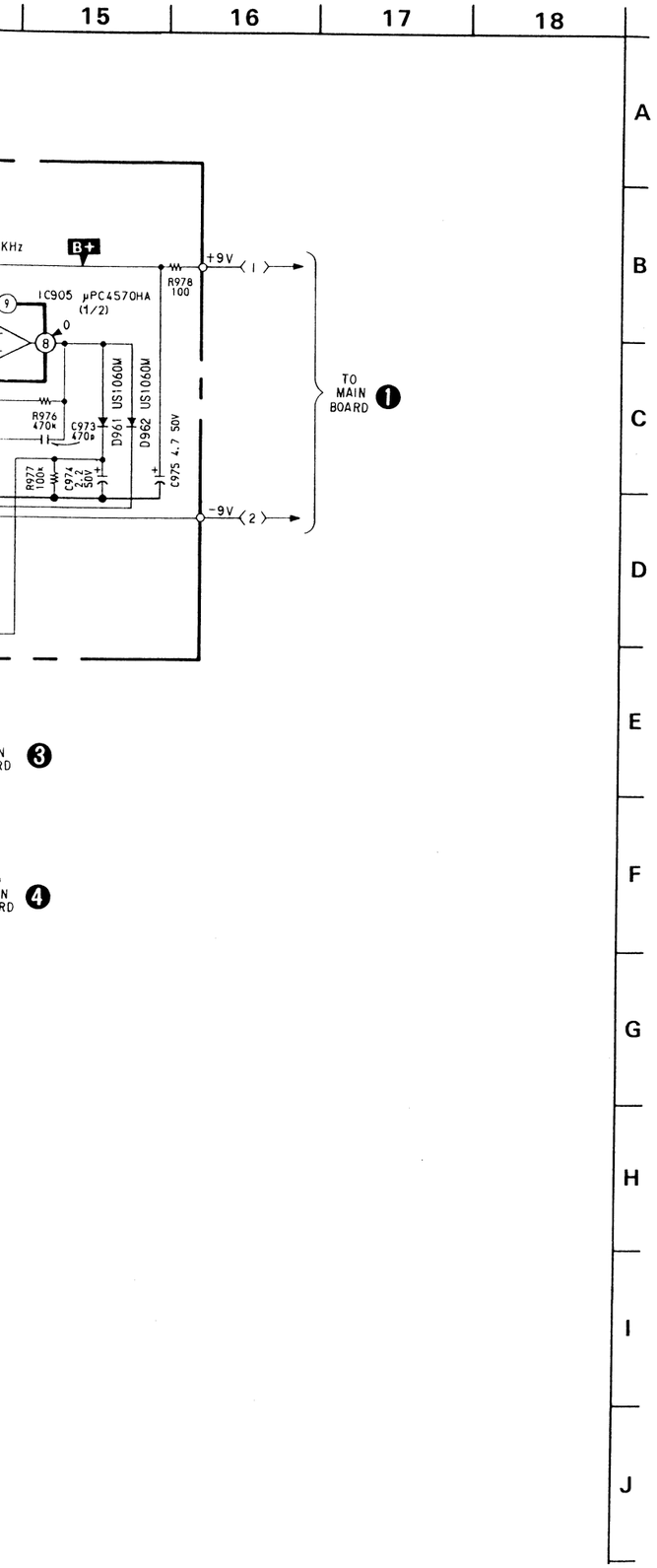
- : adjustment for repair.
- Total current is measured with no cassette installed.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PHONO
- Voltages are taken with a VOM (Input Impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : PHONO


【DISPLAY BOARD(1/4)】
IC903 B.P.F
IC904 B.P.F
IC905 B.P.F
100Hz
330Hz
1KHz
3.3KHz
10KHz
IC903 μPC4570HA (1/2)
IC904 μPC4570HA (1/2)
IC905 μPC4570HA (1/2)
B+
B−
+9V
−9V
−30V
AC3.9V
LCH
RCH
MUTE
TO MAIN BOARD
R950 100k
R970B 100k
R952 1k
Q951 2SC2785 MUTE
R995 1
C950 22 35V
C821 100 35V
L901 100μH
D815 UZL6LI
R813 100
R812 100
R978 100
D950 US1060M
D951 US1060M
D952 US1060M
D953 US1060M
D954 US1060M
D955 US1060M
D956 US1060M
D957 US1060M
D958 US1060M
D959 US1060M
D960 US1060M
D961 US1060M
D962 US1060M
D963 UZL6LI
C975 4.7 50V
IC902 LC7566
FL CONTROL
CP901 (1/3)
CP902 (1/3)
CP903 (1/3)
R982B 100k
R983B 18k
C980 1500p
FL901 FLUORESCENT INDICATOR TUBE



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.

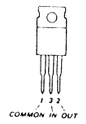


Note:

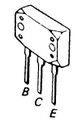
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.

4-6. SEMICONDUCTOR LEAD LAYOUTS

M5F7909
RC7809FA

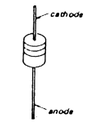


2SA1215

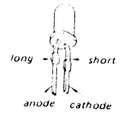


2SC1841-PA
2SC3622A-L
2SD1387
2SD1388

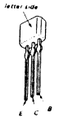
HZS30-2L
HZS30-3L
HZS6A1L
UZL-6H2
UZL-7M3



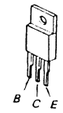
SEL2210S-C
SEL2810A-C



BA1L4M
2SA1175-HFE
2SC2785-HFE

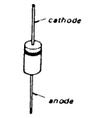


2SA985A
2SC2275A-P
2SD1585-K

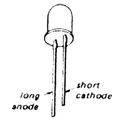


2SK246BL

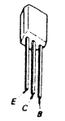
HZ5ALL
US1060M
1S1585
10E2N



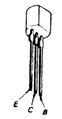
SEL2510C



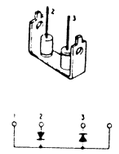
DTA114ES
DTA124ES
DTC114ES
DTC124ES



2SB1014

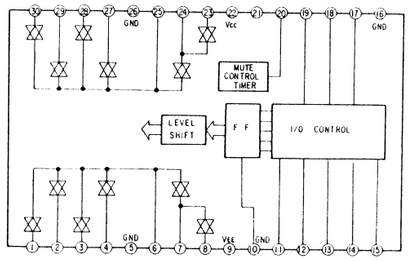


D300

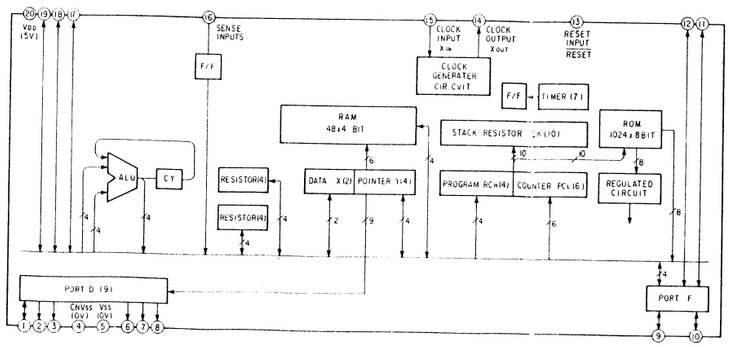


• IC Block Diagrams

IC102 LC7818



IC901 R50761-439P



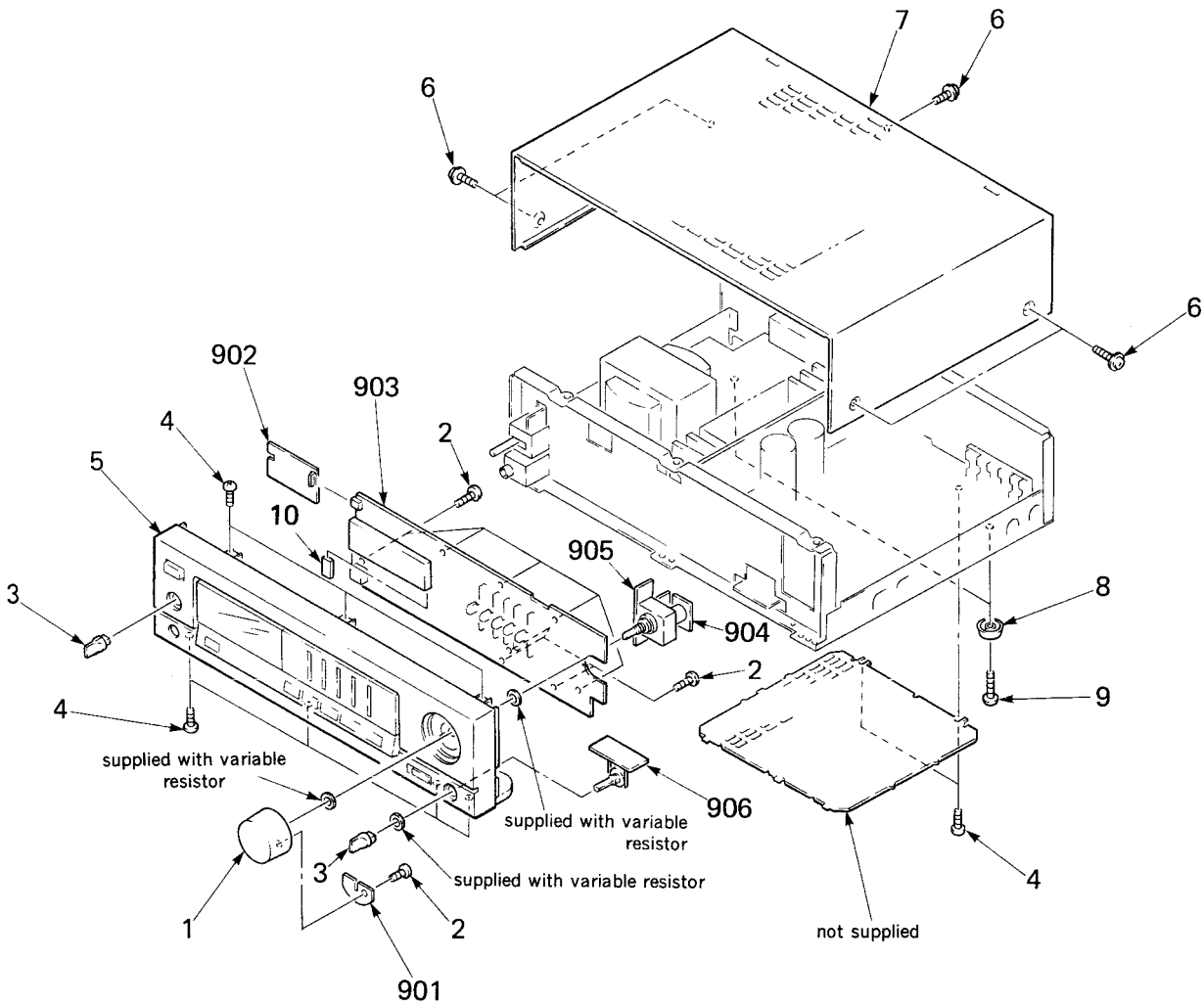
SECTION 5
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts Color

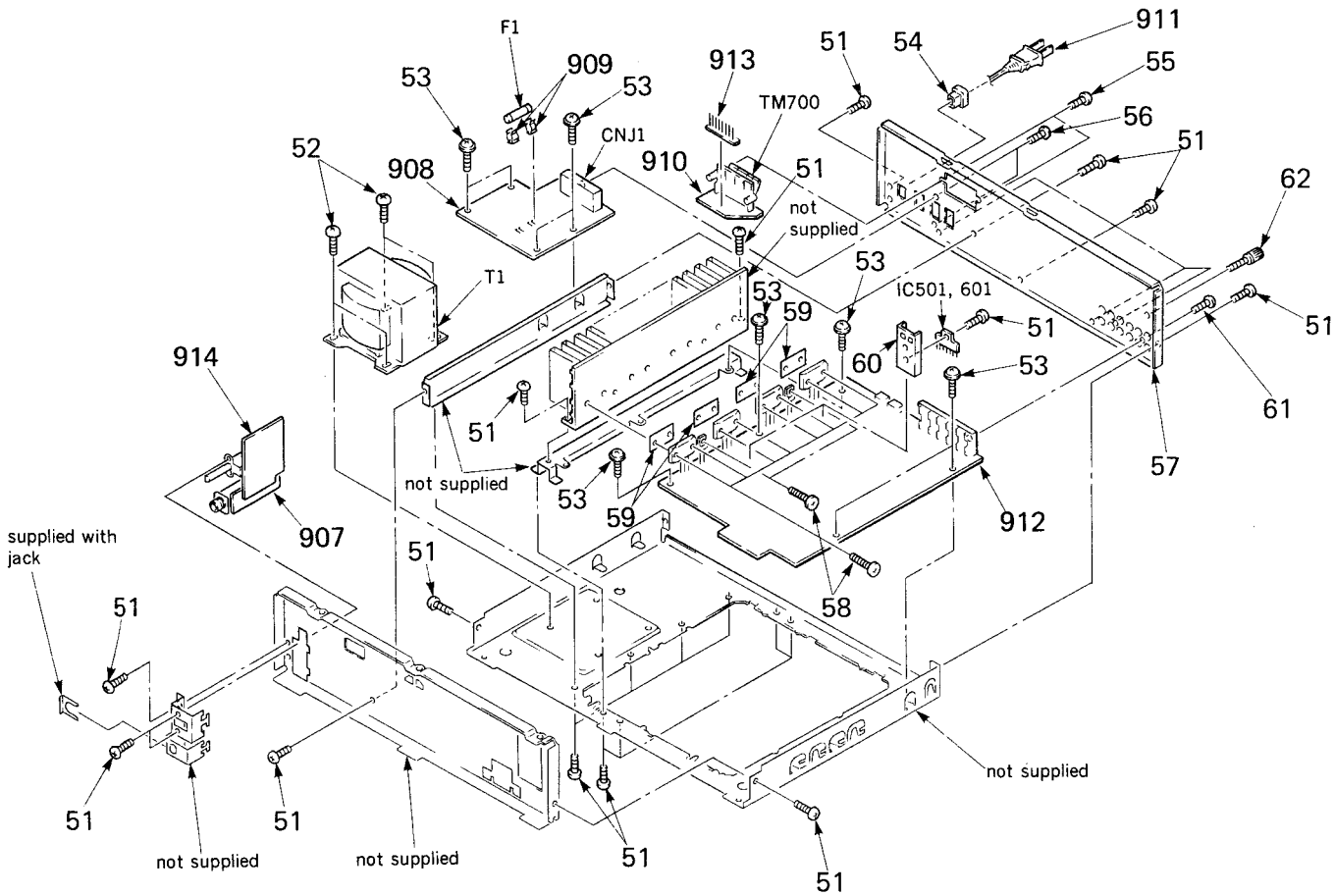
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

5-1. CASE, FRONT PANEL SECTION



Ref.No	Part No.	Description	Remarks
1	4-925-121-01	KNOB (V2)	
2	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
3	4-908-097-21	KNOB	
4	7-682-548-04	SCREW +BVTT 3X8 (S)	
5	X-4911-203-1	(AX390)....PANEL ASSY, FRONT	
	X-4911-206-1	(AX391)....PANEL ASSY, FRONT	
6	3-704-366-01	SCREW (CASE) (M3X8)	
7	4-924-920-61	CASE	
8	X-4904-496-1	FOOT ASSY	
9	7-682-550-04	SCREW +BVTT 3X12 (S)	
10	*4-924-989-01	HOLDER (FL TUBE)	
901	*1-629-941-11	PC BOARD, VR LED	
903	*A-4333-117-A	MOUNTED PCB, DISPLAY	
904	*1-629-938-11	PC BOARD, MOTOR	
905	*1-629-939-11	PC BOARD, MAIN VR	
906	*1-629-937-11	PC BOARD, BALANCE VR	

5-2. CHASSIS SECTION



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description	Remarks
51	7-682-548-04	SCREW +BVTT 3X8 (S)	
52	7-682-561-04	SCREW +BVTT 4X8 (S)	
53	7-682-548-04	SCREW, TOTSU PTTWH 3X8	
54	*3-703-244-00	BUSHING (2104), CORD	
55	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
56	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
57	*4-927-823-01	(AX390)....PANEL, BACK	
	*4-927-823-51	(AX391)....PANEL, BACK	
58	7-682-552-09	SCREW +B 3X16	
59	4-885-901-31	SHEET, RADIATION	
60	*4-927-815-01	HEAT, TINNING COPPER	
61	7-621-849-00	SCREW, TAPPING	
62	3-706-165-00	SCREW	
902	*1-629-942-11	PC BOARD, POWER SW	
907	*1-629-943-11	PC BOARD, HEADPHONE	

Ref.No	Part No.	Description	Remarks
908	*1-629-945-11	PC BOARD, PS	
909	1-533-183-11	HOLDER, FUSE	
910	*1-629-940-11	PC BOARD, SP OUT	
911	⚠1-557-577-11	CORD, POWER	
912	*A-4333-116-A	MOUNTED PCB, MAIN	
913	*1-508-831-12	H TYPE BASE POST	
914	*1-629-944-11	PC BOARD, SP SW	
CNJ1	⚠1-540-062-11	OUTLET, AC (POLAR) (AC OUTLET)	
F1	⚠1-532-748-11	FUSE, GLASS TUBE (125V/6.3A)	
IC501	8-759-144-04	IC UPC1342V	
IC601	8-759-144-04	IC UPC1342V	
T1	⚠1-449-574-11	(AX390)....TRANSFORMER, POWER	
	⚠1-449-610-11	(AX391)....TRANSFORMER, POWER	
TM700	1-536-706-00	TERMINAL BOARD (SPEAKER)	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No	Part No.	Description
901	*1-629-941-11	PC BOARD, VR LED
902	*1-629-943-11	PC BOARD, POWER SW
903	*A-4333-117-A	MOUNTED PCB, DISPLAY
904	*1-629-938-11	PC BOARD, MOTOR
905	*1-629-939-11	PC BOARD, MAIN VR
906	*1-629-937-11	PC BOARD, BALANCE VR
907	*1-629-943-11	PC BOARD, HEADPHONE
908	*1-629-945-11	PC BOARD, PS
909	1-533-183-11	HOLDER, FUSE
910	*1-629-940-11	PC BOARD, SP OUT
911	⚠1-557-577-11	CORD, POWER
912	*A-4333-116-A	MOUNTED PCB, MAIN
913	*1-508-831-12	H TYPE BASE POST
914	*1-629-944-11	PC BOARD, SP SW

CAPACITOR

C1	⚠1-161-744-00	CERAMIC	0.01MF		400V
C101	1-162-282-31	CERAMIC	100PF	10%	50V
C102	1-123-875-11	ELECT	10MF	20%	50V
C103	1-124-925-11	ELECT	2.2MF	20%	50V
C105	1-130-480-00	MYLAR	0.0056MF	5%	50V
C106	1-130-473-00	MYLAR	0.0015MF	5%	50V
C107	1-124-902-00	ELECT	0.47MF	20%	50V
C108	1-126-233-11	ELECT	22MF	20%	25V
C110	1-162-282-31	CERAMIC	100PF	10%	50V
C201	1-162-282-31	CERAMIC	100PF	10%	50V
C202	1-123-875-11	ELECT	10MF	20%	50V
C203	1-124-925-11	ELECT	2.2MF	20%	50V
C205	1-130-480-00	MYLAR	0.0056MF	5%	50V
C206	1-130-473-00	MYLAR	0.0015MF	5%	50V
C207	1-124-902-00	ELECT	0.47MF	20%	50V
C208	1-126-233-11	ELECT	22MF	20%	25V
C210	1-162-282-31	CERAMIC	100PF	10%	50V
C300	1-126-163-11	ELECT	4.7MF	20%	50V
C303	1-162-211-31	CERAMIC	33PF	5%	50V
C304	1-126-163-11	ELECT	4.7MF	20%	50V
C305	1-124-254-00	ELECT	0.68MF	20%	50V
C306	1-136-163-00	FILM	0.068MF	5%	50V
C307	1-124-464-11	ELECT	0.22MF	20%	50V
C308	1-136-155-00	FILM	0.015MF	5%	50V
C309	1-136-163-00	FILM	0.068MF	5%	50V
C310	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C311	1-136-157-00	FILM	0.022MF	5%	50V
C312	1-161-374-11	CERAMIC	0.0015MF	20%	16V
C313	1-162-304-31	CERAMIC	0.0047MF	10%	16V
C314	1-162-292-31	CERAMIC	680PF	10%	50V
C350	1-124-438-00	ELECT	1MF	20%	50V
C351	1-124-254-00	ELECT	0.68MF	20%	50V
C353	1-162-282-31	CERAMIC	100PF	10%	50V
C354	1-123-875-11	ELECT	10MF	20%	50V
C355	1-162-211-31	CERAMIC	33PF	5%	50V
C356	1-124-499-11	ELECT	1MF	20%	50V
C357	1-124-927-11	ELECT	4.7MF	20%	50V
C358	1-124-927-11	ELECT	4.7MF	20%	50V
C400	1-126-163-11	ELECT	4.7MF	20%	50V

Ref.No	Part No.	Description			
C403	1-162-211-31	CERAMIC	33PF	5%	50V
C404	1-126-163-11	ELECT	4.7MF	20%	50V
C405	1-124-254-00	ELECT	0.68MF	20%	50V
C406	1-136-163-00	FILM	0.068MF	5%	50V
C407	1-124-464-11	ELECT	0.22MF	20%	50V
C408	1-136-155-00	FILM	0.015MF	5%	50V
C409	1-136-163-00	FILM	0.068MF	5%	50V
C410	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C411	1-136-157-00	FILM	0.022MF	5%	50V
C412	1-161-374-11	CERAMIC	0.0015MF	20%	16V
C413	1-162-304-31	CERAMIC	0.0047MF	10%	16V
C414	1-162-292-31	CERAMIC	680PF	10%	50V
C450	1-124-438-00	ELECT	1MF	20%	50V
C451	1-124-254-00	ELECT	0.68MF	20%	50V
C453	1-162-282-31	CERAMIC	100PF	10%	50V
C454	1-123-875-11	ELECT	10MF	20%	50V
C455	1-162-211-31	CERAMIC	33PF	5%	50V
C457	1-124-927-11	ELECT	4.7MF	20%	50V
C458	1-124-927-11	ELECT	4.7MF	20%	50V
C500	1-124-927-11	ELECT	4.7MF	20%	50V
C502	1-124-477-11	ELECT	47MF	20%	16V
C503	1-102-233-00	CERAMIC	33PF	10%	500V
C504	1-136-163-00	FILM	0.068MF	5%	50V
C505	1-124-915-11	ELECT	10MF	20%	63V
C506	1-124-572-11	ELECT	100MF	20%	63V
C514	1-136-159-00	FILM	0.033MF	5%	50V
C600	1-124-927-11	ELECT	4.7MF	20%	50V
C602	1-124-477-11	ELECT	47MF	20%	16V
C603	1-102-233-00	CERAMIC	33PF	10%	500V
C604	1-136-163-00	FILM	0.068MF	5%	50V
C605	1-124-915-11	ELECT	10MF	20%	63V
C606	1-124-572-11	ELECT	100MF	20%	63V
C614	1-136-159-00	FILM	0.033MF	5%	50V
C700	1-124-446-11	ELECT	47MF	20%	10V
C701	1-124-443-00	ELECT	100MF	20%	6.3V
C702	1-123-875-11	ELECT	10MF	20%	50V
C703	1-124-446-11	ELECT	47MF	20%	10V
C708	1-161-494-00	CERAMIC	0.022MF		25V
C801	1-126-358-11	ELECT	10000MF	20%	71V
C802	1-126-358-11	ELECT	10000MF	20%	71V
C804	1-124-557-11	ELECT	1000MF	20%	25V
C805	1-124-557-11	ELECT	1000MF	20%	25V
C807	1-123-875-11	ELECT	10MF	20%	50V
C808	1-124-472-11	ELECT	470MF	20%	10V
C810	1-124-480-11	ELECT	470MF	20%	25V
C811	1-124-472-11	ELECT	470MF	20%	10V
C818	1-126-233-11	ELECT	22MF	20%	50V
C819	1-124-122-11	ELECT	100MF	20%	35V
C820	1-124-446-11	ELECT	47MF	20%	10V
C821	1-124-122-11	ELECT	100MF	20%	35V
C823	1-161-494-00	CERAMIC	0.022MF		25V
C904	1-130-471-00	MYLAR	0.001MF	10%	50V
C905	1-124-893-11	ELECT	2200MF	20%	10V
C906	1-161-494-00	CERAMIC	0.022MF		25V
C907	1-126-233-11	ELECT	22MF	20%	25V

Ref.No	Part No.	Description			
C908	1-124-499-11	ELECT	1MF	20%	50V
C909	1-123-875-11	ELECT	10MF	20%	50V
C910	1-123-875-11	ELECT	10MF	20%	50V
C911	1-161-494-00	CERAMIC	0.022MF		25V
C912	1-101-361-00	CERAMIC	150PF	5%	50V
C913	1-101-361-00	CERAMIC	150PF	5%	50V
C915	1-124-925-11	ELECT	2.2MF	20%	50V
C916	1-126-233-11	ELECT	22MF	20%	25V
C917	1-124-925-11	ELECT	2.2MF	20%	50V
C918	1-161-494-00	CERAMIC	0.022MF		25V
C919	1-161-379-00	CERAMIC	0.01MF	20%	16V
C920	1-161-379-00	CERAMIC	0.01MF	20%	16V
C921	1-161-379-00	CERAMIC	0.01MF	20%	16V
C925	1-162-286-31	CERAMIC	220PF	10%	50V
C926	1-161-494-00	CERAMIC	0.022MF		25V
C927	1-161-494-00	CERAMIC	0.022MF		25V
C950	1-123-357-00	ELECT	22MF	20%	35V
C951	1-123-357-00	ELECT	22MF	20%	35V
C953	1-124-257-00	ELECT	2.2MF	20%	50V
C955	1-136-158-00	FILM	0.027MF	5%	50V
C956	1-136-158-00	FILM	0.027MF	5%	50V
C957	1-124-257-00	ELECT	2.2MF	20%	50V
C958	1-124-257-00	ELECT	2.2MF	20%	50V
C960	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C961	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C962	1-124-257-00	ELECT	2.2MF	20%	50V
C964	1-161-327-00	CERAMIC	0.0033MF	20%	16V
C965	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C966	1-124-257-00	ELECT	2.2MF	20%	50V
C968	1-162-293-31	CERAMIC	820PF	10%	50V
C969	1-162-293-31	CERAMIC	820PF	10%	50V
C970	1-124-257-00	ELECT	2.2MF	20%	50V
C972	1-162-290-31	CERAMIC	470PF	10%	50V
C973	1-162-290-31	CERAMIC	470PF	10%	50V
C974	1-124-257-00	ELECT	2.2MF	20%	50V
C975	1-126-163-11	ELECT	4.7MF	20%	50V
C976	1-161-494-00	CERAMIC	0.022MF		25V
C977	1-124-443-00	ELECT	100MF	20%	10V
C980	1-161-374-11	CERAMIC	0.0015MF	20%	16V
C981	1-126-163-11	ELECT	4.7MF	20%	50V
CN806	*1-564-337-00	PIN, CONNECTOR 3P			
CNJ1	⚠1-540-062-11	OUTLET, AC (POLAR) (AC OUTLET)			
CNJ800	*1-566-210-11	PIN, CONNECTOR 3P (SYSTEM CONTROL)			
CNJ803	1-566-213-11	PIN, CONNECTOR 4P (CONTROL S OUT)			
CNJ901	*1-565-354-11	SOCKET, CONNECTOR 15P			
CNJ902	*1-561-650-00	SOCKET, CONNECTOR 5P			
CNJ903	*1-561-650-00	SOCKET, CONNECTOR 5P			
CNJ905	*1-565-295-11	PLUG, CONNECTOR 4P			
CNJ908	*1-506-713-11	PLUG, CONNECTOR (2.5MM) 11P			
CNP901	*1-565-353-11	PIN, CONNECTOR 15P			
CNP902	1-506-906-11	PIN, CONNECTOR 5P			
CNP903	1-506-906-11	PIN, CONNECTOR 5P			
CNP904	*1-508-912-00	PIN, CONNECTOR, 3P			
CNP905	1-565-296-11	SOCKET, CONNECTOR 4P			
CNP906	*1-564-777-11	PLUG, CONNECTOR (2.5MM) 2P			
CP901	1-233-081-11	COMPOSITION CIRCUIT BLOCK			
CP902	1-233-081-11	COMPOSITION CIRCUIT BLOCK			
CP903	1-233-081-11	COMPOSITION CIRCUIT BLOCK			
D301	8-719-000-26	DIODE US1060M			
D503	8-719-815-85	DIODE 1S1585			
D504	8-719-815-85	DIODE 1S1585			
D505	8-719-934-23	DIODE HZS30-3L			
D506	8-719-934-23	DIODE HZS30-3L			

Ref.No	Part No.	Description
D603	8-719-815-85	DIODE 1S1585
D604	8-719-815-85	DIODE 1S1585
D605	8-719-934-23	DIODE HZS30-3L
D606	8-719-934-23	DIODE HZS30-3L
D700	8-719-200-77	DIODE 10E2N
D701	8-719-000-26	DIODE US1060M
D800	8-719-200-80	DIODE D300
D801	8-719-200-80	DIODE D300
D802	8-719-200-77	DIODE 10E2N
D803	8-719-200-77	DIODE 10E2N
D804	8-719-200-77	DIODE 10E2N
D805	8-719-200-77	DIODE 10E2N
D806	8-719-000-26	DIODE US1060M
D807	8-719-200-77	DIODE 10E2N
D808	8-719-000-69	DIODE UZL-6H2
D809	8-719-000-26	DIODE US1060M
D814	8-719-934-22	DIODE HZS30-2L
D815	8-719-933-33	DIODE HZS6A1L
D901	8-719-000-26	DIODE US1060M
D902	8-719-000-26	DIODE US1060M
D903	8-719-000-26	DIODE US1060M
D904	8-719-000-26	DIODE US1060M
D905	8-719-000-90	DIODE UZL-7M3
D906	8-719-301-38	DIODE SEL2210S-C
D907	8-719-301-38	DIODE SEL2210S-C
D908	8-719-301-38	DIODE SEL2210S-C
D909	8-719-301-38	DIODE SEL2210S-C
D910	8-719-301-38	DIODE SEL2210S-C
D911	8-719-951-11	DIODE HZ5ALL
D913	8-719-000-26	DIODE US1060M
D918	8-719-303-00	DIODE SEL2510C
D926	8-719-000-26	DIODE US1060M
D927	8-719-301-52	DIODE SEL2810A-C
D950	8-719-000-26	DIODE US1060M
D951	8-719-000-26	DIODE US1060M
D952	8-719-000-26	DIODE US1060M
D953	8-719-000-26	DIODE US1060M
D954	8-719-000-26	DIODE US1060M
D955	8-719-000-26	DIODE US1060M
D956	8-719-000-26	DIODE US1060M
D957	8-719-000-26	DIODE US1060M
D958	8-719-000-26	DIODE US1060M
D959	8-719-000-26	DIODE US1060M
D960	8-719-000-26	DIODE US1060M
D961	8-719-000-26	DIODE US1060M
D962	8-719-000-26	DIODE US1060M
D963	8-719-933-33	DIODE HZS6A1L
FL901	1-519-520-11	INDICATOR TUBE, FLUORESCENT
IC100	8-759-112-93	IC UPC4570HA
IC101	8-759-601-43	IC M4066BP
IC102	8-759-802-52	IC LC7818
IC300	8-759-112-93	IC UPC4570HA-1
IC301	8-759-112-93	IC UPC4570HA-1
IC501	8-759-144-04	IC UPC1342V
IC601	8-759-144-04	IC UPC1342V
IC700	8-759-111-68	IC UPC1237HA
IC800	8-759-982-10	IC RC7809FA
IC801	8-759-604-49	IC M5F7909
IC900	8-749-920-59	IC A1QH3020S
IC901	8-759-632-61	IC M50761-258P
IC902	8-759-820-07	IC LC7566
IC903	8-759-112-93	IC UPC4570HA-1
IC904	8-759-112-93	IC UPC4570HA-1
IC905	8-759-112-93	IC UPC4570HA-1

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No	Part No.	Description
J100	1-565-320-11	JACK, PIN 6P (PHONO/CD/VIDEO AUDIO IN)
J101	1-565-320-11	JACK, PIN 6P (TUNER/TAPE IN, TAPE REC OUT)
J700	1-563-255-11	JACK, LARGE TYPE (HEADPHONES)
L500	*1-420-872-00	COIL, AIR CORE
L600	*1-420-872-00	COIL, AIR CORE
L901	1-410-521-11	INDUCTOR 100UH
Q100	8-729-900-63	TRANSISTOR DTA124ES
Q101	8-729-115-77	TRANSISTOR BA1L4M
Q300	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q301	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q302	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q304	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q305	8-729-107-98	TRANSISTOR 2SC3622A-L
Q306	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q307	8-729-224-63	TRANSISTOR 2SK246BL
Q400	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q401	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q402	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q403	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q404	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q405	8-729-107-98	TRANSISTOR 2SC3622A-L
Q406	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q407	8-729-224-63	TRANSISTOR 2SK246BL
Q507	8-729-190-53	TRANSISTOR 2SA985A
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q509	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q514	8-729-108-05	TRANSISTOR 2SA1841-PA
Q607	8-729-107-53	TRANSISTOR 2SC2275A-P
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q609	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q614	8-729-108-05	TRANSISTOR 2SA1841-PA
Q700	8-729-900-63	TRANSISTOR DTA124ES
Q804	8-729-801-93	TRANSISTOR 2SD1387
Q872	8-729-802-22	TRANSISTOR 2SB1014
Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q902	8-729-900-80	TRANSISTOR DTC114ES
Q903	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q904	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q905	8-729-900-61	TRANSISTOR DTA114ES
Q908	8-729-111-29	TRANSISTOR 2SD1388
Q909	8-729-802-22	TRANSISTOR 2SB1014
Q913	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q914	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q915	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q916	8-729-900-63	TRANSISTOR DTA124ES
Q917	8-729-900-63	TRANSISTOR DTA124ES
Q918	8-729-900-63	TRANSISTOR DTA124ES
Q919	8-729-900-36	TRANSISTOR DTC124ES
Q922	8-729-900-63	TRANSISTOR DTA124ES
Q951	8-729-119-78	TRANSISTOR 2SC2785-HFE

RESISTOR

Ref.No	Part No.	Description			
R100	1-249-441-11	CARBON	100K	5%	1/4W
R101	1-249-411-11	CARBON	330	5%	1/4W
R102	1-249-441-11	CARBON	100K	5%	1/4W
R103	1-249-416-11	CARBON	820	5%	1/4W
R104	1-247-897-11	CARBON	560K	5%	1/4W
R105	1-249-437-11	CARBON	47K	5%	1/4W
R106	1-249-409-11	CARBON	220	5%	1/4W
R107	1-249-441-11	CARBON	100K	5%	1/4W
R108	1-249-418-11	CARBON	1.2K	5%	1/4W
R110	1-249-418-11	CARBON	1.2K	5%	1/4W
R111	1-249-433-11	CARBON	22K	5%	1/4W
R112	1-249-418-11	CARBON	1.2K	5%	1/4W
R114	1-249-413-11	CARBON	470	5%	1/4W
R116	1-249-418-11	CARBON	1.2K	5%	1/4W
R200	1-249-441-11	CARBON	100K	5%	1/4W
R201	1-249-411-11	CARBON	330	5%	1/4W
R202	1-249-441-11	CARBON	100K	5%	1/4W
R203	1-249-416-11	CARBON	820	5%	1/4W
R204	1-247-897-11	CARBON	560K	5%	1/4W
R205	1-249-437-11	CARBON	47K	5%	1/4W
R206	1-249-409-11	CARBON	220	5%	1/4W
R207	1-249-441-11	CARBON	100K	5%	1/4W
R208	1-249-418-11	CARBON	1.2K	5%	1/4W
R210	1-249-418-11	CARBON	1.2K	5%	1/4W
R212	1-249-418-11	CARBON	1.2K	5%	1/4W
R214	1-249-413-11	CARBON	470	5%	1/4W
R216	1-249-418-11	CARBON	1.2K	5%	1/4W
R300	1-249-436-11	CARBON	39K	5%	1/4W
R301	1-249-435-11	CARBON	33K	5%	1/4W
R303	1-249-425-11	CARBON	4.7K	5%	1/4W
R304	1-249-425-11	CARBON	4.7K	5%	1/4W
R305	1-249-419-11	CARBON	1.5K	5%	1/4W
R306	1-249-437-11	CARBON	47K	5%	1/4W
R307	1-249-412-11	CARBON	390	5%	1/4W
R308	1-249-427-11	CARBON	6.8K	5%	1/4W
R309	1-249-419-11	CARBON	1.5K	5%	1/4W
R310	1-249-437-11	CARBON	47K	5%	1/4W
R311	1-249-412-11	CARBON	390	5%	1/4W
R312	1-249-427-11	CARBON	6.8K	5%	1/4W
R313	1-249-419-11	CARBON	1.5K	5%	1/4W
R314	1-249-437-11	CARBON	47K	5%	1/4W
R315	1-249-412-11	CARBON	390	5%	1/4W
R316	1-249-427-11	CARBON	6.8K	5%	1/4W
R317	1-249-419-11	CARBON	1.5K	5%	1/4W
R318	1-249-437-11	CARBON	47K	5%	1/4W
R319	1-249-412-11	CARBON	390	5%	1/4W
R320	1-249-427-11	CARBON	6.8K	5%	1/4W
R321	1-249-419-11	CARBON	1.5K	5%	1/4W
R322	1-249-437-11	CARBON	47K	5%	1/4W
R323	1-249-412-11	CARBON	390	5%	1/4W
R324	1-249-427-11	CARBON	6.8K	5%	1/4W
R327	1-249-417-11	CARBON	1K	5%	1/4W
R328	1-249-419-11	CARBON	1.5K	5%	1/4W
R330	1-249-417-11	CARBON	1K	5%	1/4W
R331	1-249-441-11	CARBON	100K	5%	1/4W
R333	1-249-409-11	CARBON	220	5%	1/4W
R335	1-249-438-11	CARBON	56K	5%	1/4W
R350	1-249-412-11	CARBON	390	5%	1/4W
R352	1-249-438-11	CARBON	56K	5%	1/4W
R353	1-249-426-11	CARBON	5.6K	5%	1/4W
R354	1-249-435-11	CARBON	33K	5%	1/4W
R356	1-249-425-11	CARBON	4.7K	5%	1/4W
R357	1-249-426-11	CARBON	5.6K	5%	1/4W
R358	1-249-429-11	CARBON	10K	5%	1/4W
R359	1-249-441-11	CARBON	100K	5%	1/4W
R361	1-247-903-00	CARBON	1M	5%	1/4W
R400	1-249-436-11	CARBON	39K	5%	1/4W
R401	1-249-435-11	CARBON	33K	5%	1/4W
R403	1-249-425-11	CARBON	4.7K	5%	1/4W
R404	1-249-425-11	CARBON	4.7K	5%	1/4W
R405	1-249-419-11	CARBON	1.5K	5%	1/4W
R406	1-249-437-11	CARBON	47K	5%	1/4W
R407	1-249-412-11	CARBON	390	5%	1/4W
R408	1-249-427-11	CARBON	6.8K	5%	1/4W
R409	1-249-419-11	CARBON	1.5K	5%	1/4W

Ref.No	Part No.	Description				
R410	1-249-437-11	CARBON	47K	5%	1/4W	
R411	1-249-412-11	CARBON	390	5%	1/4W	
R412	1-249-427-11	CARBON	6.8K	5%	1/4W	
R413	1-249-419-11	CARBON	1.5K	5%	1/4W	
R414	1-249-437-11	CARBON	47K	5%	1/4W	
R415	1-249-412-11	CARBON	390	5%	1/4W	
R416	1-249-427-11	CARBON	6.8K	5%	1/4W	
R417	1-249-419-11	CARBON	1.5K	5%	1/4W	
R418	1-249-437-11	CARBON	47K	5%	1/4W	
R419	1-249-412-11	CARBON	390	5%	1/4W	
R420	1-249-427-11	CARBON	6.8K	5%	1/4W	
R421	1-249-419-11	CARBON	1.5K	5%	1/4W	
R422	1-249-437-11	CARBON	47K	5%	1/4W	
R423	1-249-412-11	CARBON	390	5%	1/4W	
R424	1-249-427-11	CARBON	6.8K	5%	1/4W	
R427	1-249-417-11	CARBON	1K	5%	1/4W	
R428	1-249-419-11	CARBON	1.5K	5%	1/4W	
R430	1-249-417-11	CARBON	1K	5%	1/4W	
R431	1-247-901-11	CARBON	820K	5%	1/4W	
R433	1-249-409-11	CARBON	220	5%	1/4W	
R435	1-249-438-11	CARBON	56K	5%	1/4W	
R450	1-249-412-11	CARBON	390	5%	1/4W	
R452	1-249-438-11	CARBON	56K	5%	1/4W	
R453	1-249-426-11	CARBON	5.6K	5%	1/4W	
R454	1-249-435-11	CARBON	33K	5%	1/4W	
R456	1-249-425-11	CARBON	4.7K	5%	1/4W	
R457	1-249-426-11	CARBON	5.6K	5%	1/4W	
R459	1-249-441-11	CARBON	100K	5%	1/4W	
R461	1-247-903-00	CARBON	1M	5%	1/4W	
R500	1-249-441-11	CARBON	100K	5%	1/4W	
R502	1-249-417-11	CARBON	1K	5%	1/4W	
R503	1-249-438-11	CARBON	56K	5%	1/4W	
R504	1-249-417-11	CARBON	1K	5%	1/4W	
R505	1-249-438-11	CARBON	56K	5%	1/4W	
R507	1-249-431-11	CARBON	15K	5%	1/4W	
R508	1-249-420-11	CARBON	1.8K	5%	1/4W	
R509	1-249-423-11	CARBON	3.3K	5%	1/4W	
R510	⚠1-247-688-11	CARBON	10	5%	1/4W	F
R511	⚠1-247-688-11	CARBON	10	5%	1/4W	F
R512	1-214-789-00	METAL PLATE	0.1		5W	
R513	1-214-789-00	METAL PLATE	0.1		5W	
R514	1-249-417-11	CARBON	1K	5%	1/4W	
R515	⚠1-247-713-11	CARBON	1K	5%	1/4W	F
R516	⚠1-247-713-11	CARBON	1K	5%	1/4W	F
R530	⚠1-247-700-11	CARBON	100	5%	1/4W	F
R531	1-249-430-11	CARBON	12K	5%	1/4W	
R532	1-247-727-11	CARBON	10	5%	1/2W	
R533	1-249-437-11	CARBON	47K	5%	1/4W	
R534	1-247-727-11	CARBON	10	5%	1/2W	
R537	⚠1-212-942-00	FUSIBLE	2.2	5%	1/2W	F
R597	⚠1-215-869-11	METAL OXIDE	1K	5%	1W	F
R600	1-249-441-11	CARBON	100K	5%	1/4W	
R602	1-249-417-11	CARBON	1K	5%	1/4W	
R603	1-249-438-11	CARBON	56K	5%	1/4W	
R604	1-249-417-11	CARBON	1K	5%	1/4W	
R605	1-249-438-11	CARBON	56K	5%	1/4W	
R607	1-249-431-11	CARBON	15K	5%	1/4W	
R608	1-249-420-11	CARBON	1.8K	5%	1/4W	
R609	1-249-423-11	CARBON	3.3K	5%	1/4W	
R610	⚠1-247-688-11	CARBON	10	5%	1/4W	F
R611	⚠1-247-688-11	CARBON	10	5%	1/4W	F
R612	1-214-789-00	METAL PLATE	0.1		5W	
R613	1-214-789-00	METAL PLATE	0.1		5W	
R614	1-249-417-11	CARBON	1K	5%	1/4W	
R615	⚠1-247-713-11	CARBON	1K	5%	1/4W	F

Ref.No	Part No.	Description				
R616	⚠1-247-713-11	CARBON	1K	5%	1/4W	F
R630	⚠1-247-700-11	CARBON	100	5%	1/4W	F
R631	1-249-430-11	CARBON	12K	5%	1/4W	
R632	1-247-727-11	CARBON	10	5%	1/2W	
R633	1-249-438-11	CARBON	56K	5%	1/4W	
R634	1-247-727-11	CARBON	10	5%	1/2W	
R637	⚠1-212-942-00	FUSIBLE	2.2	5%	1/2W	F
R697	⚠1-215-869-11	METAL OXIDE	1K	5%	1W	F
R701	1-249-427-11	CARBON	6.8K	5%	1/4W	
R702	1-249-441-11	CARBON	100K	5%	1/4W	
R703	1-249-441-11	CARBON	100K	5%	1/4W	
R704	1-249-433-11	CARBON	22K	5%	1/4W	
R705	1-249-436-11	CARBON	39K	5%	1/4W	
R706	⚠1-216-481-11	METAL OXIDE	1.2K	5%	3W	F
R800	⚠1-249-455-11	CARBON	4.7	5%	1/4W	F
R801	⚠1-249-455-11	CARBON	4.7	5%	1/4W	F
R805	1-249-425-11	CARBON	4.7K	5%	1/4W	
R806	1-249-397-11	CARBON	22	5%	1/4W	
R808	1-249-399-11	CARBON	33	5%	1/4W	
R810	1-247-756-11	CARBON	2.2K	5%	1/2W	
R812	1-249-405-11	CARBON	100	5%	1/4W	
R813	1-249-405-11	CARBON	100	5%	1/4W	
R814	1-249-415-11	CARBON	680	5%	1/4W	
R815	1-249-426-11	CARBON	5.6K	5%	1/4W	
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R906	1-249-429-11	CARBON	10K	5%	1/4W	
R907	1-249-417-11	CARBON	1K	5%	1/4W	
R908	1-249-429-11	CARBON	10K	5%	1/4W	
R909	1-249-417-11	CARBON	1K	5%	1/4W	
R910	1-249-393-11	CARBON	10	5%	1/4W	
R911	1-247-901-11	CARBON	820K	5%	1/4W	
R912	1-249-425-11	CARBON	4.7K	5%	1/4W	
R913	1-249-433-11	CARBON	22K	5%	1/4W	
R914	1-249-433-11	CARBON	22K	5%	1/4W	
R915	1-249-429-11	CARBON	10K	5%	1/4W	
R916	1-249-429-11	CARBON	10K	5%	1/4W	
R917	1-249-433-11	CARBON	22K	5%	1/4W	
R918	1-249-441-11	CARBON	100K	5%	1/4W	
R919	1-249-433-11	CARBON	22K	5%	1/4W	
R920	1-249-417-11	CARBON	1K	5%	1/4W	
R921	1-249-433-11	CARBON	22K	5%	1/4W	
R922	1-249-441-11	CARBON	100K	5%	1/4W	
R923	1-249-441-11	CARBON	100K	5%	1/4W	
R924	1-249-429-11	CARBON	10K	5%	1/4W	
R925	1-249-413-11	CARBON	470	5%	1/4W	
R926	1-249-413-11	CARBON	470	5%	1/4W	
R927	1-249-413-11	CARBON	470	5%	1/4W	
R928	1-249-413-11	CARBON	470	5%	1/4W	
R929	1-249-413-11	CARBON	470	5%	1/4W	
R930	1-249-417-11	CARBON	1K	5%	1/4W	
R931	1-249-419-11	CARBON	1.5K	5%	1/4W	
R932	1-249-394-11	CARBON	12	5%	1/4W	
R933	1-249-394-11	CARBON	12	5%	1/4W	
R934	1-249-441-11	CARBON	100K	5%	1/4W	
R935	1-247-887-00	CARBON	220K	5%	1/4W	
R937	1-249-441-11	CARBON	100K	5%	1/4W	
R938	1-249-433-11	CARBON	22K	5%	1/4W	
R939	1-249-433-11	CARBON	22K	5%	1/4W	
R940	1-247-903-00	CARBON	1M	5%	1/4W	
R941	1-249-423-11	CARBON	3.3K	5%	1/4W	
R942	1-249-433-11	CARBON	22K	5%	1/4W	
R946	1-249-423-11	CARBON	3.3K	5%	1/4W	
R948	1-249-413-11	CARBON	470	5%	1/4W	
R949	1-249-417-11	CARBON	1K	5%	1/4W	
R950	1-249-441-11	CARBON	100K	5%	1/4W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No	Part No.	Description			
R952	1-249-417-11	CARBON	1K	5%	1/4W
R953	1-247-885-00	CARBON	180K	5%	1/4W
R954	1-249-429-11	CARBON	10K	5%	1/4W
R955	1-249-405-11	CARBON	100	5%	1/4W
R956	1-249-441-11	CARBON	100K	5%	1/4W
R957	1-249-439-11	CARBON	68K	5%	1/4W
R958	1-249-424-11	CARBON	3.9K	5%	1/4W
R959	1-247-901-11	CARBON	820K	5%	1/4W
R960	1-249-441-11	CARBON	100K	5%	1/4W
R961	1-249-441-11	CARBON	100K	5%	1/4W
R962	1-249-440-11	CARBON	82K	5%	1/4W
R963	1-249-424-11	CARBON	3.9K	5%	1/4W
R964	1-247-903-00	CARBON	1M	5%	1/4W
R965	1-249-441-11	CARBON	100K	5%	1/4W
R966	1-249-438-11	CARBON	56K	5%	1/4W
R967	1-249-423-11	CARBON	3.3K	5%	1/4W
R968	1-247-903-00	CARBON	1M	5%	1/4W
R969	1-249-441-11	CARBON	100K	5%	1/4W
R970A	1-249-438-11	CARBON	56K	5%	1/4W
R970B	1-249-441-11	CARBON	100K	5%	1/4W
R971	1-249-423-11	CARBON	3.3K	5%	1/4W
R972	1-247-901-11	CARBON	820K	5%	1/4W
R973	1-249-441-11	CARBON	100K	5%	1/4W
R974	1-249-435-11	CARBON	33K	5%	1/4W
R975	1-249-423-11	CARBON	3.3K	5%	1/4W
R976	1-247-895-00	CARBON	470K	5%	1/4W
R977	1-249-441-11	CARBON	100K	5%	1/4W
R978	1-249-405-11	CARBON	100	5%	1/4W
R979	1-249-403-11	CARBON	68	5%	1/4W
R980	1-247-903-00	CARBON	1M	5%	1/4W
R981	1-249-441-11	CARBON	100K	5%	1/4W
R982A	1-249-430-11	CARBON	12K	5%	1/4W
R982B	1-249-441-11	CARBON	100K	5%	1/4W
R983A	1-249-393-11	CARBON	10	5%	1/4W
R983B	1-249-432-11	CARBON	18K	5%	1/4W
R985	1-247-751-11	CARBON	820	5%	1/2W
R987	1-249-433-11	CARBON	22K	5%	1/4W
R989	1-249-433-11	CARBON	22K	5%	1/4W
R990	1-249-433-11	CARBON	22K	5%	1/4W
R991	1-249-433-11	CARBON	22K	5%	1/4W
R992	1-249-433-11	CARBON	22K	5%	1/4W
R993	1-249-433-11	CARBON	22K	5%	1/4W
R996	1-247-727-11	CARBON	10	5%	1/2W
RV300	1-238-079-11	RES, VAR, CARBON(MOTOR) 100KX2 (VOLUME)			
RV301	1-238-493-11	RES, VAR, CARBON 150K/150K (BALANCE)			
RV302	1-238-078-11	RES, VAR, SLIDE 250K/250K (100Hz)			
RV303	1-238-078-11	RES, VAR, SLIDE 250K/250K (330Hz)			
RV304	1-238-078-11	RES, VAR, SLIDE 250K/250K (1KHz)			
RV305	1-238-078-11	RES, VAR, SLIDE 250K/250K 3.3KHz)			
RV306	1-238-078-11	RES, VAR, SLIDE 250K/250K (10KHz)			
RV501	1-238-011-11	RES, ADJ, CARBON 470			
RV601	1-238-011-11	RES, ADJ, CARBON 470			
RY700	1-515-356-00	RELAY			
RY901	1-515-701-11	RELAY			
S1	1-554-303-21	SWITCH, KEY BOARD (PHONO)			
S2	1-554-303-21	SWITCH, KEY BOARD (TUNER)			
S3	1-554-303-21	SWITCH, KEY BOARD (CD)			
S4	1-554-303-21	SWITCH, KEY BOARD (TAPE)			
S5	1-554-303-21	SWITCH, KEY BOARD (VIDEO)			
S6	1-554-303-21	SWITCH, KEY BOARD (DBFB)			
S7	1-554-303-21	SWITCH, KEY BOARD (SYSTEM POWER)			
S500	1-571-861-11	SWITCH, ROTARY SLIDE (SPEAKERS)			
T1	⚠1-449-574-11	(AX390)....TRANSFORMER, POWER			
	⚠1-449-610-11	(AX391)....TRANSFORMER, POWER			

Ref.No	Part No.	Description
T2	⚠1-448-517-21	TRANSFORMER, POWER
TB502	*1-535-115-00	TERMINAL
TB602	*1-535-115-00	TERMINAL
TB701	*1-535-115-00	TERMINAL
TB702	*1-535-115-00	TERMINAL
TB803	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P
TB805	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P
TB808	*1-535-116-00	TERMINAL
TB892	*1-535-140-00	BASE POST 22MM (10MM PITCH) 3P
TM700	1-536-706-00	TERMINAL BOARD (SPEAKER)
X900	1-577-077-11	OSCILLATOR, CERAMIC (400KHz)

ACCESSORY & PACKING MATERIAL
****

1-465-129-11	(AX390)....REMOTE COMMANDER (RM-S390)
1-465-144-11	(AX391)....REMOTE COMMANDER (RM-P202)
2-128-529-01	(AX390)....CASE, BATTERY
*3-704-350-01	SHEET (STANDARD), PROTECTION
3-750-159-21	(AX391)....INSTRUCTION, REMOTE COMMANDER
3-750-168-21	MANUAL, INSTRUCTION
4-925-079-01	(AX391)....CASE, BATTERY
*4-927-810-01	(AX390)....INDIVIDUAL CARTON
*4-927-811-01	(AX391)....INDIVIDUAL CARTON
*4-927-812-01	CUSHION

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

• Trableshooting Guide

Symptom	Remedy
No audio	• Check the power cord connection. • Check the SPEAKERS selector setting. • Check the connections. • Check the setting of the function selector. • Check the speaker terminal connection and the speaker cord for a short.
No audio from one channel	• Adjust the BALANCE control. • Check the speaker cord or connecting cord connection.
Lack of bass sound or obscure instrument position	• Check the connection between the amplifier and speakers.
Severe hum or noise when using the turntable	• Ground the turntable system. • Fully insert the plug of the connecting cord. • Disconnect the ground wire of the turntable from the terminal when using an MM cartridge with a ground piece.
Noise when TV is turned on	• Move the TV away from the audio system.
Switching on DBFB does not affect the sound	• DBFB reinforces only low frequencies at low sound levels.

9-953-726-11

Sony Corporation
Audio Group

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